Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
2006 Quadrennial Regulatory Review –	)	
Review of the Commission's Broadcast	)	
Ownership Rules and Other Rules Adopted	)	MB Docket No. 06-121
Pursuant to Section 202 of the	)	
Telecommunications Act of 1996	)	
	)	
2002 Biennial Regulatory Review – Review	)	
of the Commission's Broadcast Ownership	)	
Rules and Other Rules Adopted Pursuant to	)	MB Docket No. 02-277
Section 202 of the Telecommunications Act	)	
of 1996	)	
	)	
Cross-Ownership of Broadcast Stations and	)	MM Docket No. 01-235
Newspapers	)	
	)	
Rules and Policies Concerning Multiple	)	
Ownership of Radio Broadcast Stations in	)	MM Docket No. 01-317
Local Markets	)	
	)	
Definition of Radio Markets	)	MM Docket No. 00-244
	)	

REPLY COMMENTS OF FUTURE OF MUSIC COALITION

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APPENDIX

Future of Music Coalition (FMC) submits this reply comment to the FCC's 2006 review of its media ownership rules based on our independent research of the radio industry. FMC is a research and advocacy organization that addresses issues at the intersection of media, music, and technology. FMC seeks to advocate for the interests of musicians in particular as well as the interests of the general public of music listeners. But we are not a membership organization, and unlike some participants in this proceeding, our organization has no financial stake in the outcome. As an organization founded in 2000 precisely because of developments in music distribution technology, FMC understands the changing media and entertainment environment. Yet, because of our independence and commitment to the public interest, we also understand that increasing the size of radio companies is not the appropriate response. Instead, the FCC should consider the fifteen policy recommendations that we detail in this reply comment, taking an excerpt from our December 2006 study, *False Premises, False Promises: A Quantitative History of Ownership Consolidation in the Radio Industry.*[1] Based on extensive quantitative analysis, we believe that our list of suggested changes provide the best way to promote real competition, localism, and diversity.

Key Arguments of Radio Industry

The National Association of Broadcasters (NAB) and Clear Channel both argue that new technologies make it imperative for radio companies to become larger. As Clear Channel puts it, "marketplace developments have rendered the current local radio ownership caps entirely unnecessary in light of competition."[2] They argue that "common ownership," a euphemism for

[1] We have included the full study as the appendix to these Reply Comments [hereinafter "Appendix"].
[2] Comments of Clear Channel Communications, Inc., 2006 Quandrennial Regulatory Review, FCC MB Docket No. 06-121 (Oct. 23, 2006) [hereinafter "Clear Channel Comments"], iii.

"larger radio companies," has some benefits and, amazingly, no costs: radio companies can grow larger in "the absence of any risk of competitive harm."[3] The astonishing absolutism of the claim that there is literally zero probability of "competitive harm" suggests a problem in their facts, their logic, or both. As we discuss below, competition (as economists define it in terms of market structure) decreased considerably in the radio industry after the Telecommunications Act of 1996. More concentrated market structures imply a greater risk of competitive harm, not a decrease in risk to zero. But the Commission does not have to base its decision on levels of risk. The larger radio companies of the past decade have in fact demonstrated no benefits from their greater size and appear instead to harm competition, localism, and diversity. Our research into the programming offered by station groups in excess of the local caps—the largest radio companies on a local level—shows that larger station groups do not offer a more diverse set of programming formats. In fact, those station groups offer almost no programming in so-called "niche formats."[4] The largest companies are offering the least innovation and the least diversity in programming.

We would put NAB's and Clear Channel's comments into their economic and political context. Radio companies have two margins to pursue, broadly speaking: the pursuit of regulatory largesse and the development of new business models. The two strategic paths are not mutually exclusive, but they do compete for companies' resources and their managers' attention. It is cheaper, from the radio companies' perspective, to ask for changes in regulations that allow them to restructure the radio market. But that does not mean it is socially optimal to do so, or that a restructured radio market would improve anything. What would benefit the public most are new business models and new approaches to programming that can appeal to listeners in a crowded media environment.

Developing new ways to serve the public better is difficult. Unfortunately, instead of devoting their resources toward developing new business models, the NAB members have

[3] *Id.* at iv.
[4] *See* Appendix, Ch. 3, at 93-98.

invested in a long discussion about the amazing business models that *other* media technologies such as broadband internet[5] and satellite radio[6] now employ. For example, NAB marvels that "According to a 2006 study, '[p]eople turn more often now to online news than they did four years ago because the offerings are more attractive and because they have formed online news consumption habits.' "[7] This is no excuse for the way most commercial radio broadcasters have long since abandoned original radio news reporting[8] while National Public Radio has doubled its listenership in the last five years, demonstrating radio's continued vitality as a medium.[9] The negative tone of the NAB's and Clear Channel's comments, if it were to be taken seriously, should have caused panic among their investors. But their laments for traditional radio and their plaudits for new technologies are not to be taken seriously. Media platforms compete based on their business models, including technological advancements, new ways of using technology, and appealing media content. Rather than relying on their ideas on those fronts, the radio companies seek to become larger yet again. Based on the facts, however—declining stock prices, measured performance, and recently announced sales of stations—we question whether it is economies of scale or diseconomies of scale that have come to fruition.[10]

If economies of scale actually benefited consumers, then the ability to syndicate programming should generate profits regardless of station ownership. Non-affiliated and not commonly owned stations can buy their programming.[11] And if the homogenized programming these companies offer serves the public so well, other audio platforms such as satellite radio

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[5] Comments of the National Association of Broadcasters, 2006 Quandrennial Regulatory Review, FCC MB Docket No. 06-121 (Oct. 23, 2006) [hereinafter "NAB Comments"], 12-23.
[6] Clear Channel Comments at 11-12.
[7] NAB Comments at 13.
[8] *See, e.g.*, Marc Fisher, *Blackout on the Dial*, AM. JOURNALISM REV., June 1998, at 44.
[9] Jacques Steinberg, "Money Changes Everything," N.Y. TIMES, March 19, 2006, Sec. 2, p. 1.
[10] *See* Appendix, Ch. 1, at 45-48.
[11] *Cf.* Appendix, Ch. 3, at 111-12.

would carry the radio companies' content. Station ownership is a separate issue from syndicated programming. The radio companies are seeking not just increased horizontal concentration but also vertical integration when they advocate elimination of the local ownership cap. Yet they provide no argument for the benefits of having content producers own a higher percentage of the outlets. Nor do they explain how or why larger companies would serve local communities better. One is left to speculate that they seek supracompetitive profits from the market power that would come from controlling more outlets. But the FCC's responsibility is not to make money for radio companies, unless that happens to benefit the public. As the report contained in the appendix to our comments shows, consolidation has decreased competition, localism, and diversity and has not benefited the public.

Competition

What does competition mean? In common parlance, competition refers to the horse-race or tournament kind of competition we see in sports. Economists use the term to refer to a decentralized, unconcentrated market structure. But to NAB and Clear Channel, competition means simply the absence of regulation. Or it can mean the ability of particular incumbent radio companies to survive, that is, to continue competing. This ambiguity in the term "competition" has led to much confusion in radio regulation.[12] The policy goal for the FCC should be the economists' definition. Competition in the sense of an unconcentrated market structure provides more than just a decreased risk of market power (although it does that). It also provides more incentives for radio companies to exert the maximum effort and resources toward retaining and attracting new listeners. The enhanced incentive from competition is especially crucial in radio

[12] *See* PETER DICOLA & KRISTIN THOMSON, RADIO DEREGULATION: HAS IT SERVED CITIZENS AND MUSICIANS? 40-41 (2002), *at* http://www.futureofmusic.org/research/radiostudy.cfm.

because the Commission already restricts entry into both full-power and low-power broadcasting.[13] Without the threat of free or unregulated entry, and with many would-be broadcasters left out, radio incumbents enjoy special protection from new entrants into their industry. Thus it is imperative for the Commission to maintain an unconcentrated market structure so that radio companies have ample incentives to meet the demands of AM and FM radio listeners.

On the score of competition in the sense of market concentration, the radio industry has gone backwards over the last decade. The number of radio owners has declined overall by one-third and the number of commercial owners has declined by 43 percent.[14] Ten companies have almost two-thirds of the market share nationwide.[15] On a local level, the signal-contour market definition has resulted in abnormally large station groups in 104 different markets and higher concentration in those markets.[16] An overwhelming majority of local markets have concentration well beyond the threshold for antitrust concern.[17] These figures fully incorporate "out-of-market" listening as described in NAB's comments[18]—and they still demonstrate alarming levels of concentration.

Clear Channel submits that the volatility of market shares should alleviate concerns about these high and unprecedented concentration levels in radio. Prof. Jerry Hausman's analysis of this issue is misleading. Arbitron shares are small numbers, and are measured in relatively large and imprecise increments of 0.1. So a change of one or two increments in Arbitron ratings

[13] *See* Appendix, Ch. 1, at 20-21, 23-24.
[14] *Id.* at 32-34.
[15] *Id.* at 39-40.
[16] *See* Appendix, Ch. 2, at 60-64.
[17] *Id.* at 67-70.
[18] NAB Comments at 11-12 & Attachment C ("A Second Look at Out-of-Market Listening and Viewing: It Has Even More Significance").

necessarily represents a large percentage change. Suppose a station has a 3.0 share, a fairly typical number. A change to a 2.8 share reflects a 7 percent change—greater than the 5 percent threshold used to indicate a "relatively constant" share in Prof. Hausman's analysis.[19] But the actual change in market share, due to rounding, may be as little as 4 percent. Besides, the volatility of individual stations' market shares is irrelevant. What matters are the station groups' market shares. Station groups have the discretion to alter programming within the group—for instance, to switch one station from original programming to a simulcast of another. Programming changes within station groups will reallocate ratings among the individual stations. So the relevant economic object for measuring volatility would be the station groups' shares, taking common ownership into account. Data on individual stations' shares tell a misleading and incomplete story about the workings of radio markets.

Clear Channel's analysis of market shares' volatility actually comes in service of their argument that the FCC should measure only concentration of outlets, not concentration of market shares.[20] What they advocate is like ignoring the difference between a 50,000 square foot Wal-Mart store and a 1,500 square foot mom-and-pop store. Only in a footnote does Clear Channel acknowledge that the size of the broadcast area must be taken into account: "It should be noted that it may be appropriate to take technical differences across stations into account when determining which stations have the potential to be successful competitors."[21] Along with power, tower height, and antenna shape, radio station's position on the dial and listeners' habits (operating through their ability to pre-program the frequencies of their favorite stations) are also important for determining each station's listenership.[22] Market shares capture the impact of all

[19] Clear Channel Comments, Exhibit 2 (Statement of Prof. Jerry A. Hausman), at 9.
[20] Clear Channel Comments at 59-60.
[21] Clear Channel Comments, Exhibit 2, at p. 8 n.18.
[22] *See* Appendix, Ch. 1, at 38-39.

these factors succinctly. What matters for measuring a radio station's economic, social, and political influence are actual listener ratings. It makes no sense to measure outlet concentration and then make corrections based on power, tower height, antenna shape, position on the dial, AM vs. FM, and so on. The FCC already has listener ratings available to measure the competitive position of radio stations.

Localism

Clear Channel claims to be "local" in the first sentence of its comments.[23] But the experience of Country radio listeners in Poughkeepsie, New York, and Eau Claire, Wisconsin, contradicts their claims. Twenty-nine of the top thirty songs played on each Clear Channel's country stations in those two cities, or 97 percent, were identical. As the FCC's own research staff has emphasized, the top thirty songs on radio stations have been receiving an ever-greater proportion of the airtime, making this an even more accurate measure.[24] What can explain such a huge correlation in playlists in totally different regions of the U.S. except a lack of localism in the internal organization of the nation's largest radio company?

The localism goal does not support further consolidation. The geographic reach of radio companies has already expanded drastically. One hundred and twenty-one companies and organizations now own radio stations in at least ten different cities. In 1975, only nine companies did so.[25] FMC created a Local Ownership Index to measure the geographic reach of

[23] Clear Channel Comments at i ("Clear Channel Communications, Inc. ('Clear Channel') is one of the world's leading media and entertainment companies and is the licensee of locally-programmed and locally-oriented radio and television stations that are dedicated to serving communities across the United States.").
[24] *See* "Preliminary Analysis for Diversity and Localism in Radio Playlists Study" (August 2004), *at* http://www.fcc.gov/ownership/additional.html.
[25] Appendix. Ch. 1, at 34-36.

radio companies. The index has declined 28 percent over the last decade.[26] As noted in the introduction, instead of regulatory relief, it is imperative for broadcasters to develop business models and attractive programming that take advantage of terrestrial radio's unique strengths. Radio programming—in the sense of broadcaster-sequenced music or talk—has never been more popular. The issue is whether the owners of the most ubiquitous and local medium can develop success business plans.

Diversity

The data both Clear Channel and NAB rely on involves measures in which formats are counted up without recognition of obvious format similarities. For instance, the regression analysis conducted by Prof. Hausman for Clear Channel uses as its outcome a simple count of how many format names appeared in each market.[27] The charts provided by Dr. Mark Fratrik of BIA Financial Networks in NAB's comments use a similar approach.[28] Under this methodology, Lite AC, Bright AC, Soft AC, and AC are all considered just as different as Rock, Jazz, News, and Sports. And, under this methodology, a station that listed its three formats as Rock/Jazz/Classical and another station that listed its three formats as Rock/Classical/Jazz would be considered two totally different formats with nothing in common. Clearly, Clear Channel and NAB's methodology is fundamentally flawed. Measures that simply count formats naively are totally inappropriate to measure the degree to which radio programming serves the public.[29] As part of our research, FMC examined the playlists of many of these supposedly distinct formats,

[26] Appendix, Ch. 2, at 75-79.
[27] *See* Clear Channel Comments, Exhibit 2, at 3 ("The left hand side variable in the econometric model is the number of formats available in the market.").
[28] NAB Comments, Attachment G ("Over-the-Air Radio Service to Diverse Audiences"), at 3-7.
[29] *See* Appendix, Ch. 3, at 83-86, 101-103.

and we found that many formats overlap considerably in terms of the songs played. Pairs of supposedly different formats can share well over half the same songs, like Rock and Active Rock, which overlap at an 80 percent level.[30]

Interestingly, the FCC's own researchers have also moved beyond studying just formats to study individual songs on stations' playlists. They find that "owners prefer to play similar music across their stations in different markets and across their stations within the same format" and that "the tendency to play more similar music across stations within the same format outweighs the tendency to differentiate play lists within the same market."[31] These newly released findings accord with our own analysis, which found extensive overlap in the playlists of commonly owned stations in the same format.[32] We concur with the FCC researchers' conclusion: "Commonly owned stations within the same format and market play more similar music than separately-owned stations within the same format and market, because common ownership within format generates greater play list similarity."[33] In light of these new revelations and strong conclusions from the FCC's own expert research staff, it is untenable for NAB and CC to continue to claim that diversity on the airwaves has increased.

Conclusion: Policy Proposals

To conclude, we would like to call special attention to the constructive policy proposals we have offered in the attached study. From the study's conclusion:[34]

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[30] *Id.* at 98-101.
[31] "FCC Radio Market Structure and Music Diversity Paper" (Spring 2005), 19, *at* http://www.fcc.gov/ownership/additional.html.
[32] Appendix, Ch. 3, at 103-110.
[33] "FCC Radio Market Structure and Music Diversity Paper" at 19.
[34] Appendix, Conclusion, at 114-116.

Safeguarding Competition

(1) **Maintain the current local ownership caps**; or

(2) **Institute lower caps**. Ownership caps on radio-station ownership prevent concentration of economic, social, and political power. The most commonly accepted measure of concentration, the Herfindahl-Hirschman Index (HHI), has reached a high level in the national market and dangerous levels in most local markets. We have designed a pair of methods to calculate the ownership caps necessary to keep the HHI below the threshold of danger in each local market.[35] The FCC could justify a lower cap by using either of the methods or by combining them, applying the lower cap whenever the results of the two methods differ.

(3) **Retain the current attribution rules**. In light of the recent trend of taking media companies off the public stock market and into the holdings of private equity firms, it is essential that the FCC continue to use its 5 percent threshold to determine when a company is considered to own a radio station.[36] Otherwise, shifting radio stations to private equity could become a loophole in the local ownership caps.

(4) **Encourage ownership by small, independent, or minority owners**. We recommend that Congress and the FCC consider several initiatives, ranging from tax incentives to requirements on sale and divestiture of stations, including the 448 reportedly to be sold by Clear Channel.[37]

Restoring Localism

(5) **Adopt the Local Ownership Index developed by Future of Music Coalition.** Local ownership is one key aspect of the broader concept of localism. But it has the benefit of being

[35] *See* Appendix, Ch. 2, at 70-74.
[36] *See* Appendix, Introduction, at 13-14.
[37] *See* Appendix, Ch. 1, at 48.

relatively easy to quantify.[38] From 1975 to 2005, the Local Ownership Index has declined drastically, suggesting the need for the following three policy proposals to restore local ownership.

(6) **Change the full-power licensing process.** In recent years, some non-profit entities have benefited greatly from the points system used to allocate new, noncommercial, full-power FM licenses. We applaud this previous progress, but we also point out that many of the organizations that have benefited are national.[39] In the future, new licenses should go to entirely local entities and should only be transferred to entirely local entities. Otherwise, the level of local control over local radio stations will remain harmed.

(7) **Use the digital audio broadcast (DAB) transition as an occasion to reallocate spectrum to entirely local entities**. The transition to DAB has been slow so far. With concentration at historically high levels and localism at historically low levels, it does not make sense to allow current licensees to enjoy two to five times the digital channels with their current spectrum allocation. Local, independent entities could make better use of that spectrum.

(8) **License more low-power FM stations**. Some states, especially on the east coast, still have fewer than five licensed low-power FM stations. Congress should heed the engineering studies commissioned by the FCC and relax the rule banning low-power FM licenses when they would use frequencies supposedly too close to those of existing full-power FM stations.

Fostering Diversity

(9) **Measure diversity more accurately**. The FCC should disregard the industry practice of using format variety—simply counting up the number of format names—as a measure of true

[38] *See* Appendix, Ch. 2, at 75-79.
[39] *See* Appendix, Ch. 1, at 34-38.

programming diversity. Instead, the FCC should acknowledge the imperfections in the available data on formats, work to collect better data, and in the meantime use more subtle measures of format variety like those we have implemented.[40]

(10) **End structural payola.** The practice of accepting funds from "independent promoters" in return for airplay—alongside more crude forms of payola involving gifts to radio employees—represents a structural problem with how radio playlists have been developed. The FCC should enforce the prohibition on payola by requiring broadcasters to provide data on both playlists and on consumer-testing pools of songs and monitor that data to verify a level playing field for musicians on music radio.

(11) **Apply the competition, localism, and diversity goals to the DAB spectrum**. The diversity requirement is especially important to DAB if the spectrum reallocation we recommend does not occur. In this case, current licensees will enjoy up to five times the spectrum. The FCC should expect five times the diversity from its licensees—not just rehashing of the same narrow playlists and syndication choices.

Improving Access to Data

(12**) Collect more ownership-related information from licensees**. The public should have much better basic information about radio licensees: such as their owner; their parent company; their headquarters and main centers of employment; and their local marketing agreements (LMAs), if any.

(13) **Begin collecting objective data on programming**. We emphasize the term "objective" because we believe that creating access to the simplest objective information about programming

[40] *See* Appendix, Ch. 3, at 85-90.

would be a major step forward. We do not expect the FCC to begin analyzing or classifying content—that step can be left to the public, but only if it has the raw, objective data. We would include such objective and easily verifiable information such as what networks each station carries, what popular syndicated shows each station carries, what playlists music stations are using, and so on.

(14) **Make all information on radio easily available to the public on the FCC website**. Citizens should not have to purchase a $7,000 commercial database to understand who owns which radio stations, where those owners are located, and what those owners are putting on the air.

(15) **Keep increasing public access and public involvement.** The FCC should have responsibility for cataloguing the public comments made in its proceedings. It should also continue the current policy of holding more public hearings when the media-ownership rules are reviewed. We have been encouraged by the FCC's efforts on this front and we urge the FCC to maintain its trajectory towards more open and transparent decision-making.

We offer these fifteen proposals in recognition of the changing media environment and the need for the FCC to maintain its role as guarantor of competition, localism, and diversity on the public airwaves. In this reply comment, we have responded to the major arguments offered by the radio industry on behalf of further consolidation. We urge the Commission to take the opposite tack. The attached study aims to provide a clear, accessible, and independent assessment of developments in the radio industry in a historical context, especially those of the last decade. We believe that the data analysis in the study supports the policy proposals we have offered above, and we respectfully submit both as part of this important proceeding.

Respectfully submitted,

_____/s/_____

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Michael Bracy, Policy Director

Kristin Thomson, Deputy Director

January 16, 2007

FALSE PREMISES, FALSE PROMISES

A Quantitative History of Ownership Consolidation in the Radio Industry

by **Peter DiCola**
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December 2006

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Appendices

Executive Summary

This report is a quantitative history of ownership consolidation in the radio industry over the past decade, studying the impact of the Telecommunications Act of 1996 and accompanying FCC regulations.

A Brief History of Radio Regulation

Since the 1930s, the federal government has limited the number of radio stations that one entity could own or control. In the 1980s and early 1990s, the Federal Communications Commission (FCC) began gradually to relax these limits. Finally, in the Telecommunications Act of 1996 (Telecom Act), Congress eliminated the national cap on station ownership, allowing unlimited national consolidation. With the same law, Congress also raised the local caps on station ownership. In addition, as this study describes in detail, the FCC regulations implementing the Telecom Act allowed more consolidation to occur than alternative regulations would have allowed.

Methodology and Data Sources

To keep the quantitative analysis as simple and transparent as possible, we have not included technical statistical analysis. Instead, we have filled this report with standard, antitrust-style measures of concentration; our own new methodologies for measuring localism and diversity; and many time-series analyses that simply track who owned what when. The study covers thirty years of historical data wherever possible; in other places, the study focuses on the last ten to twelve years—the main period of interest for examining the impact of the Telecom Act.

The FCC's own efforts at collecting data on the radio industry are inadequate, as we emphasize throughout the study. Just as the FCC does, we have relied on industry-collected data to measure changes in radio consolidation and programming. These proprietary sources include: Media Access Pro (Radio Version) from industry consultants BIA Financial Networks, Duncan's American Radio, and Radio and Records magazine.

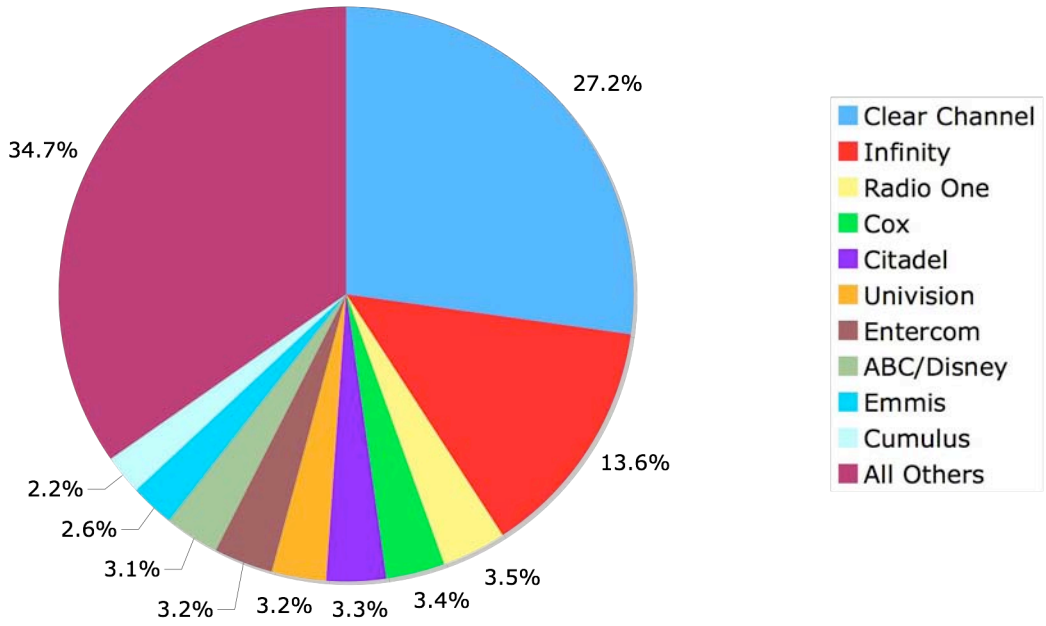
Major Findings of the Study

Highlights from the study are organized here in similar fashion to its three chapters. The first chapter focuses on national radio consolidation, the second on local radio consolidation, and the third on radio programming.

Emergence of Nationwide Radio Companies

1. **Fewer radio companies:** The number of companies that own radio stations peaked in 1995 and has declined dramatically over the past decade. This has occurred largely because of industry consolidation but partly because many of the hundreds of new licenses issued since 1995 have gone to a handful of companies and organizations.
2. **Larger radio companies:** Radio-station holdings of the ten largest companies in the industry increased by almost fifteen times from 1985 to 2005. Over that same period, holdings of the fifty largest companies increased almost sevenfold.
3. **Increasing revenue concentration:** National concentration of advertising revenue increased from 12 percent market share for the top four companies in 1993 to 50 percent market share for the top four companies in 2004.

Figure 1: National Share of Radio Listeners, Commercial Sector, 2005.

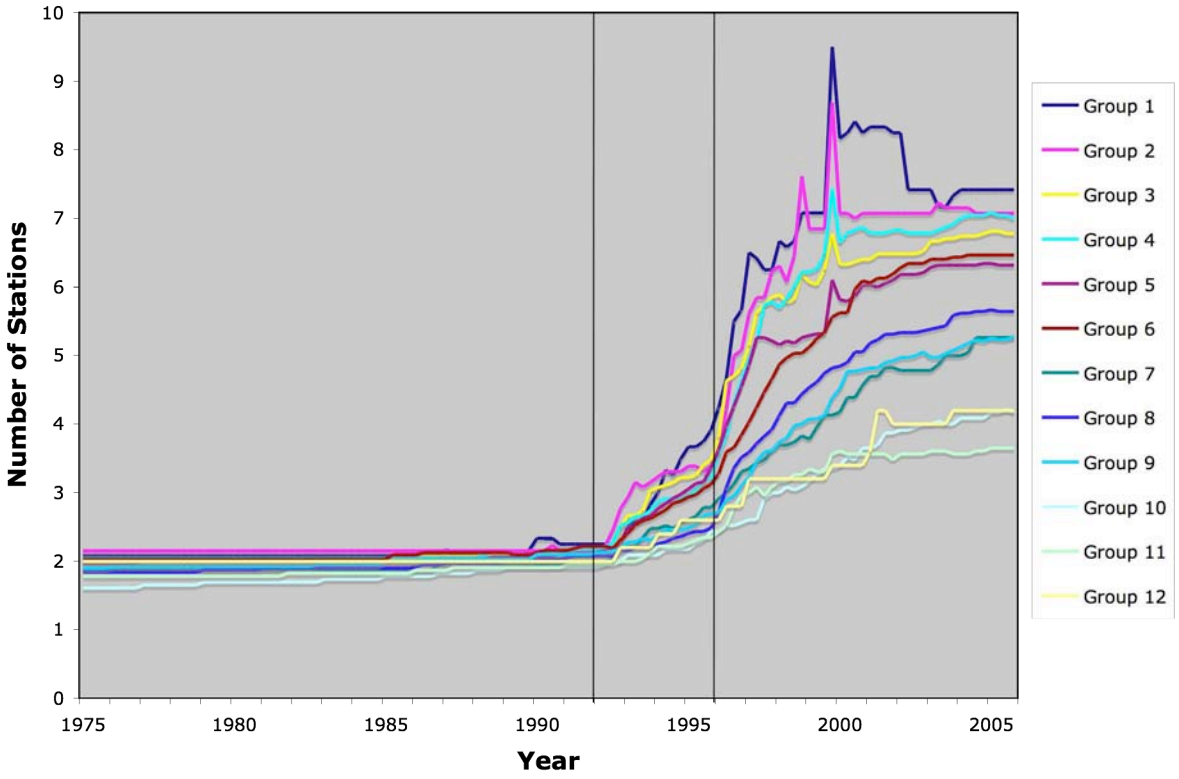


4. **Increasing ratings concentration:** National concentration of listenership continued in 2005—the top four firms have 48 percent of the listeners, and the top ten firms have almost two-thirds of listeners [see Figure 1].
5. **Declining listenership:** Across 155 markets, radio listenership has declined over the past fourteen years for which data are available, a 22 percent drop since its peak in 1989.

Consolidation in Local Radio Markets

6. **The Largest Local Owners Got Larger:** The number of stations owned by the largest radio entity in the market has increased in every local market since 1992 and has increased considerably since 1996 [see Figure 2].

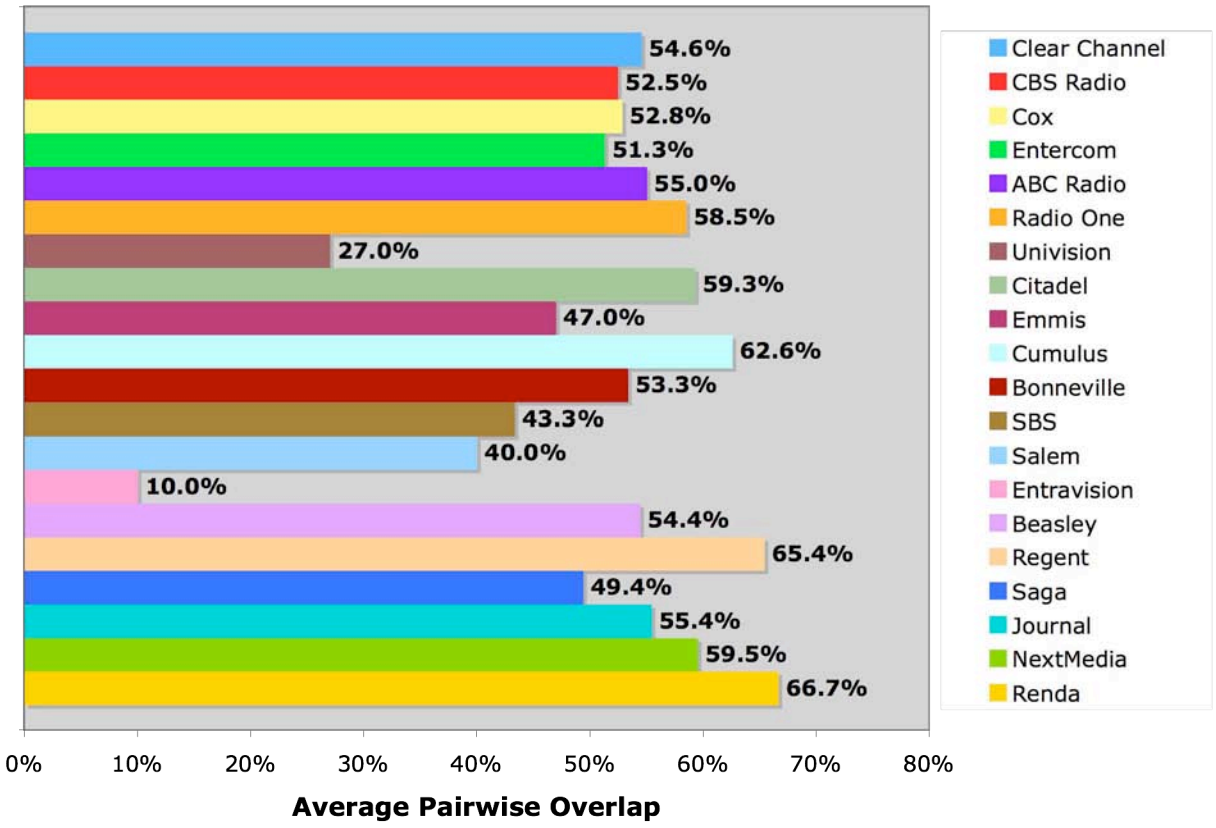
Figure 2: Number of Stations Owned in a Market by the Largest Owner in a Market, 1975-2005, Average by Market Group.



7. **More Markets with Owners Over the Local Cap:** The FCC's signal-contour market definition allowed companies to exceed local ownership caps in 104 markets.
8. **Increasing Local Concentration:** Concentration of ownership in the vast majority of local markets has increased dramatically.
9. **How Lower Caps Can Be Justified:** The FCC's local caps—in fact, even lower caps than the current caps—can be justified by analyzing how the caps prevent excessive concentration of market share.
10. **Declining Local Ownership:** The Local Ownership Index, created by Future of Music Coalition, shows that the localness of radio ownership has declined from an average of 97.1 to an average of 69.9, a 28 percent drop.
11. **Restoration of Local Ownership is Possible:** To restore the Local Ownership Index to even 90 percent of its pre-1996 level, the FCC would have to license dozens of new full power and low-power radio licenses to new local entrants and re-allocate spectrum to new local entrants during the digital audio broadcast transition.

12. **Homogenized Programming:** Just fifteen formats make up 76% of commercial programming.
13. **Large Station Groups Program Narrowly:** Owners who exceed or exactly meet the local ownership cap tend to program heavily in just eight formats.
14. **Only Small Station Groups Offer Niche Formats:** Niche musical formats like Classical, Jazz, Americana, Bluegrass, New Rock, and Folk, where they exist, are provided almost exclusively by smaller station groups.
15. **Small Station Groups Sustain Public-Interest Programming:** Children's programming, religious programming, foreign-language and ethnic-community programming, are also predominantly provided by smaller station groups.
16. **Format Overlap Remains Extensive:** Radio formats with different names can overlap up to 80% in terms of the songs played on them.

Figure 3: Average Pairwise Overlap Between Stations in the Same Format, By Owner, June 25-July 1, 2006.



17. **Individual Stations Use Highly Similar Playlists:** Playlists for commonly owned stations in the same format can overlap up to 97%. For large companies, even the average pairwise overlap usually exceeds 50% [see Figure 3].

18. **Network Ownership Is Also Concentrated:** The three largest radio companies in terms of station ownership are also the three largest companies in terms of programming-network ownership.

Conclusion

Radio consolidation has no demonstrated benefits for the public. Nor does it have any demonstrated benefits for the working people of the music and media industries, including DJs, programmers—and musicians. The Telecom Act unleashed an unprecedented wave of radio mergers that left a highly consolidated national radio market and extremely consolidated local radio markets. Radio programming from the largest station groups remains focused on just a few formats—many of which overlap with each other, enhancing the homogenization of the airwaves.

From the recent new-payola scandal to the even more recent acknowledgements that giant media conglomerates have begun to fail as business models, we can see that government and business are catching up to the reality that radio consolidation did not work. Instead, the Telecom Act worked to reduce competition, diversity, and localism, doing precisely the opposite of Congress's stated goals for the FCC's media policy. Future debates about how to regulate information industries should look to the radio consolidation story for a warning about the dangers of consolidated control of a media platform.

About Future of Music Coalition

Future of Music Coalition (FMC) is a national non-profit education, research and advocacy organization that identifies, examines, interprets and translates the challenging issues at the intersection of music, law, technology and policy. FMC achieves this through continuous interaction with its primary constituency—musicians—and in collaboration with other creator/citizen groups.

About the Primary Author

Peter DiCola is a Ph.D. candidate in economics at the University of Michigan in Ann Arbor. He received his J.D. *magna cum laude* from the University of Michigan Law School in May 2005, and was awarded the Henry M. Bates Memorial Scholarship. Currently, he serves as the Research Director of the Future of Music Coalition while he works on his dissertation. He has research interests in the fields of telecommunications law, intellectual property law, law and economics, labor economics, and industrial organization. He is the co-author, with Kristin Thomson, of *Radio Deregulation: Has It Served Citizens and Musicians?* (2002), which was cited by the U.S. Court of Appeals for the Third Circuit in *Prometheus Radio Project v. FCC.* He has also written a chapter, "Employment and Wage Effects of Radio Consolidation," for the scholarly collection *Media Diversity and Localism* (Lawrence Erlbaum and Associates, 2006).

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Introduction

Radio is not what it used to be. A brief and obscure regulatory provision tucked into the Telecommunications Act of 1996 – Congress's comprehensive rewriting of telephone and cable regulations – eliminated or relaxed the previous limits on radio-station ownership. As a result, ownership of radio stations consolidated intensively over the next five years with some ownership groups acquiring dozens, if not hundreds, of radio stations across the country. The unprecedented creation of large radio conglomerates represents a fundamental transformation of the radio landscape.

With speed exceeding Wal-Mart's ascent to retail dominance,[1] Clear Channel and, to a lesser extent, Viacom/Infinity/CBS Radio gained unprecedented market shares both nationally and locally. But Clear Channel's rise presents greater problems than Wal-Mart's. Radio is not about shelf space but about the public airwaves, one of the only free and ubiquitous media through which the public can access culture and information. And Clear Channel's gains in market share came through a regulatory experiment in which Congress allowed more mergers and acquisitions than ever before. These changes have shown cause for alarm.

In 2002, the Future of Music Coalition published a study that examined radio consolidation and its effects on the public and the music community.[2] We compared radio to a public park, threatened by privatization and over-commercialization. And we raised concerns about how consolidation had led to homogenized programming, facilitated a new form of payola,[3] and presented musicians with fewer opportunities to get on the air.

Our 2002 study was submitted to the Federal Communications Commission (FCC) as part of its biennial review of its media ownership rules. Many citizens and public-interest groups from a variety of political perspectives participated in the proceeding, leading to a record-breaking number of comments filed at the FCC, most in opposition to further media consolidation. Despite strong evidence and negative public opinion, the FCC did move ahead with recommendations to loosen ownership regulations on radio, TV and newspapers. It wasn't until a win by media reform advocates in *Prometheus v. FCC* at the Third Circuit Court of Appeals that the FCC was prevented from further relaxing the radio ownership

[1] Wal-Mart's national retail market share rose from 9 percent in 1987 to 27 percent in 1995, comparable to Clear Channel's rise from 2 percent national radio-revenue market share in 1995 to 28 percent by 2001. See Federal Reserve Bank of Atlanta, "The Race for Retail Market Share in the Southeast," 2002 *Econ South* q. 2, *at* http://www.frbatlanta.org/invoke.cfm?objectid=D3F86AD9-E129-43A7-93E52B3590A62543&method=display (last visited November 28, 2006).

[2] Peter DiCola and Kristin Thomson, *Radio Deregulation: Has It Served Citizens and Musicians?* (2002), *at* http://www.futureofmusic.org/research/radiostudy.cfm (last visited November 28, 2006).

[3] See, for example, Office of New York State Attorney General, "CBS Radio Settles Payola Allegations," (Oct. 19, 2006), *at* http://www.oag.state.ny.us/press/2006/oct/oct19a_06.html (last visited November 30, 2006).

limits that remained after the Telecommunications Act of 1996. In 2006, the FCC launched another review of its media ownership rules. With this new study we hope to contribute an updated and greatly expanded perspective on the recent history of radio consolidation.

Contents and Purposes of This Study

This study contains three chapters, each of which is divided into several subsections. Chapter 1 takes the most expansive look at the national radio industry. It surveys a thirty-year history, tracing ownership consolidation from 1975 to 2005. Chapter 2 focuses on local radio markets and the extreme consolidation they have experienced since the Telecommunications Act of 1996. Chapter 3 examines radio programming, and how consolidation appears to have affected the radio formats, individual songs, and the volume of syndicated network content carried on the air.

We will submit this study to the FCC in its 2006 review of media ownership rules. We believe this research will cause policy makers to question the benefits of consolidation as they decide whether to further relax radio station ownership regulations. In fact, the data contained in this report should urge the FCC to re-institute certain regulations or develop new regulations to address the loss of competition, diversity, and localism in radio. We also hope that this new, comprehensive, and unprecedented history of radio consolidation can inform current and future policy debates about the information industries.

The listening public deserves an explanation of how the radio industry has changed over the past decade. Working people—from musicians to DJs to local advertisers—need to understand how the media environment has changed, often for the worse. Although our data analysis has been robust, we have tried to make the results contained in this report clear and easy to understand. We provided graphs and figures wherever appropriate, documented our sources diligently and displayed reproducible results.

The Value of Radio

With the onset of internet radio, satellite radio, podcasting, and portable digital music devices (including cell phones) over the past decade or so, some observers mistakenly consider traditional, terrestrial radio to be of waning importance. Traditional radio companies have actually begun making the transition to digital broadcasting, sometimes called "HD Radio," but this transition has happened slowly and the results remain uncertain. But digital or not, radio remains one of our most valuable media. No new technology has the penetration that radio has. Approximately 94 percent of Americans listen to radio each week.[4] Compare that to the 42 percent of US households that had high-speed internet access as of March 2006.[5]

[4] The Arbitron Company, "Radio Today: How American Listens to Radio, 2006 Edition," *at* http://www.arbitron.com/national_radio/home.htm (last visited November 30, 2006).
[5] John Horrigan, "Home Broadband Adoption 2006," *available at* http://www.pewinternet.org/PPF/r/184/report_display.asp (last visited November 30, 2006).

Radio remains important and vital in many ways. The kinds of audio content offered by traditional radio—DJed sequences of songs, live concerts, news and talk shows, education and how-to guides—remain incredibly popular. Advertisers still buy radio time. Musicians still seek radio play to further their careers. Emergency authorities still rely on radio during disasters like hurricanes, fires, and chemical spills.[6] Noncommercial radio has become increasingly vital, with National Public Radio (NPR) doubling its listenership in the past five years.[7] Even the vast majority of early adopters of new audio technologies expect to maintain their current habits of listening to traditional radio.[8]

Although new audio technologies present exciting opportunities for consumers and musicians, they do not predict the demise of traditional radio. For example, satellite radio can program in more granular musical genres, but cannot build local connections between musicians and communities like traditional radio does. Webcasts might have a local focus, but they lack the audience of traditional radio and cannot transmit to your car. Podcasts provide a portable means to hear music, news, or other audio programs in your car or anywhere else. But licensing copyrighted music for podcasts presents a significant hurdle.[9]

Of course, solutions to the problems with and limitations of these new technologies are possible. Podcast licensing could advance more quickly, for instance, or technology to put webcasts into cars could arise. Such developments would benefit the public. But they would not necessarily threaten the value of radio. Media technologies need not replace each other, but can instead complement each other. The addition of satellite, webcasting, and podcasting makes the music marketplace more open and competitive. These new technologies have helped musicians and individual listeners route around the bottlenecks that consolidation has caused in traditional media like radio. The ultimate effect of new technologies on radio depends on radio companies' responses to these business challenges—and on policies that facilitate the best outcome possible for the public.

[6] See Eric Klinenberg, *Fighting for Air: The Battle to Control America's Media* (forthcoming 2007).
[7] Jacques Steinberg, "Money Changes Everything," *New York Times*, March 19, 2006, Sec. 2, p. 1.
[8] Arbitron & Edison Media Research, "The Infinite Dial: Radio's Digital Platforms," p. 13, *available at* http://www.arbitron.com/downloads/digital_radio_study.pdf (last visited August 27, 2006).
[9] See, for example, Michelle Kessler, "Storm Clouds Gather Over Podcasting," *USA Today*, August 3, 2005, *available at* http://www.usatoday.com/money/media/2005-08-03-podcasting-usat_x.htm (last visited December 1, 2006).

Bigger Is Definitely Not Better

So far the responses of policy makers and radio companies have fallen far short of ideal. Congress's response to new technologies' development was to eliminate or relax ownership limits to allow radio companies to consolidate. Radio companies' response was to acquire lots of stations as quickly as possible. Clear Channel multiplied its station holdings by a factor of 30, going from 40 stations to 1,200 stations within five years of the Telecom Act.[10] In addition to its radio holdings, Clear Channel amassed television stations, billboards, concert promotion, and concert venue properties.

We wrote in our 2002 study that Clear Channel's "bigger is better" strategy was misguided and expressed doubts about the supposed "synergies" they sought.[11] As it turned out, Clear Channel's strategy had both dubious legality[12] and dubious profitability. By the spring of 2005, the company had abandoned its attempt to use its holdings across several media for leverage, breaking the company into three parts: radio/television, concerts, and billboards.[13] In November 2006, on the heels of a six-year decline in the company's stock price,[14] a group of private equity investors purchased Clear Channel's assets.[15] At the same time, Clear Channel announced that it would sell off 448 of its radio stations in markets outside the top 100 ranked by size, as well as all 42 of its television stations.[16]

Serious policy concerns remain despite the Clear Channel buyout. Thomas H. Lee Partners is one the two leading private equity firms in the purchase, along with Bain Capital. It also has holdings in two other large radio companies, Univision and Cumulus Media Partners, which it might have to relinquish. For example, Thomas H. Lee Partners' three radio properties would own a combined 17 stations in the Houston-Galveston market, well beyond the current cap of 8 stations per owner. The FCC should retain its current rule for attributing ownership interest, which sets a 5 percent threshold for what counts as "ownership" when

[10] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[11] DiCola and Thomson, *Radio Deregulation*, pp. 30-31.
[12] Allegations against Clear Channel include payola, antitrust tying, fraud, racketeering, and theft of public funds. See Chapter 1 of this study and the sources cited therein.
[13] Press Release, "Clear Channel Communications Announces Planned Strategic Realignment of Businesses to Enhance Shareholder Value," April 29, 2005, *available at* http://www.clearchannel.com/Corporate/PressRelease.aspx?PressReleaseID=1438 (last visited December 2, 2006).
[14] We refer here to the broad downward trend that is easily visible from a simple stock chart, not to temporary ups and downs of the stock. See, for example, the "1-decade" chart for stock symbol CCU at http://www.investorguide.com (last visited December 2, 2006).
[15] Angela Moore, "Clear Channel Agrees to $18.7 Billion Buyout," *Marketwatch.com*, Nov. 27, 2006 (corrected version).
[16] Press Release, "Clear Channel Announces Plan to Sell Radio Stations Outside the Top 100 Markets and Entire Television Station Group," November 16, 2006, *available at* http://www.clearchannel.com/Corporate/PressRelease.aspx?PressReleaseID=1825 (last visited December 2, 2006).

enforcing the ownership caps.[17] Otherwise, the current trend of taking media companies private will open another loophole in the media ownership rules.

Some observers have gone so far as to claim that the Clear Channel sell-off of 448 stations alleviates concerns about concentration in the radio industry.[18] No facts support such a claim. Even after the sell-off, Clear Channel will retain its dominant position, with over 700 stations in 88 markets out of the top 100 ranked by size. Those stations represent 88 percent of Clear Channel's listenership and 86 percent of its revenue—leaving its market share mostly intact and well ahead of the second-largest firm.[19] Moreover, Clear Channel's new private-equity owners could retain an option to buy back their holdings in Univision (with 73 stations) and Cumulus Media Partners (with 37 stations).[20] Either way, Clear Channel will retain ample size to pose a threat to competition in the markets where they will remain.

The research in this study will show how much damage has already occurred with respect to the FCC's policy goals of competition, diversity, and localism. Relaxing the local ownership limits further would simply let Clear Channel get bigger—again—when the lesson from the past decade of experience with consolidation suggests doing exactly the opposite. Clear Channel's size was the root cause of their many problems in radio: the potentially illegal business practices, the loss of localism, the harms to programming diversity, and so on.

More than anything, the Clear Channel buyout shows that policy makers must develop skepticism about the public benefits of such unproven—and ultimately, in this case, illusive—economies of scale.[21] The public has been harmed by both the formation of Clear Channel as a radio giant and the policy that allowed it to form. We cannot predict the future. Perhaps the 448 sold-off stations will go to local, independent, and minority owners who will revitalize radio. But it would take far more than 448 new or newly independent stations to restore local ownership to what it was.[22] And Clear Channel's business practices—most importantly, its modern version of payola—may have damaged the health of the radio bandwidth. Listenership is down. We can only speculate—though we are not alone in our speculation—that listenership has declined because of the damage to diversity and localism from Clear Channel's rise. Policy makers must not repeat their mistake, which flowed from the false premise that bigger is better. Not so for radio companies.

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[17] See 47 C.F.R. § 73.3555 n. 2 (2004). Investment companies, as defined in 15 U.S.C. § 80a-3, can own up to 20 percent of a station before the FCC will deem them to have a "cognizable interest."

[18] "[N]ow that Clear Channel is splitting the company and most likely selling the 448 stations designated for divestiture to numerous buyers, industry observers believe consolidation opponents will be appeased enough to let the big-market deregulation the company is seeking slide by." Ron Orol, "Clear Channel Needs FCC Help," *Deal.com*, November 21, 2006 (subscription required; copy on file with the author).

[19] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

[20] Orol, "FCC Help."

[21] "Economies of scale" refers to the economic situation in which a larger firm can produce goods or services more efficiently (up to a point, at least) than a smaller firm. The opposite situation of "diseconomies of scale," in which larger firms produces goods or services *less* efficiently, is equally possible both in theory and in real-world practice.

[22] See Chapter 2 of this study, in particular the section entitled "The Local Ownership Index."

Lessons from Radio for the Internet

In a rapidly changing media environment, it becomes all the more important to learn lessons from the experience of established industries like radio. Brand new industries are harder to measure, understand, and evaluate. But data are available to measure the radio industry in various ways, however imperfect those data might be. In fact, the "experiment" Congress created, by allowing intensive consolidation in the radio industry, allows us to study consolidation in an information industry. Historical data on the radio industry give us a way to see what happens when ownership of the platform and the content in an information industry becomes concentrated in relatively few companies' hands. While these similarities are not a perfect correspondence, they are useful given the lack of comprehensive, standardized data about the emerging marketplace.

Studying radio consolidation provides lessons beyond just radio. We can extrapolate from radio's experience to suggest what could happen if a few owners of the internet's infrastructure gain effective control over the entire internet platform—the subject of the current debate over network neutrality.[23] In the mid-1990s, it was the radio industry that convinced Congress and the FCC of the need for a set of regulations that would allow them to buy more stations, both locally and nationally. The rationale presented at the time was that the radio industry needed to take advantage of economies of scale in order to survive in a crowded media marketplace. If new regulations passed, the radio industry promised to deliver more and better programming to serve the public.

However, the Telecom Act had a radically different outcome. As articulated in the next three chapters, the Act led to massive industry consolidation, a loss of localism, and a lack of programming diversity. Even more compelling, the Telecom Act, in conjunction with the FCC's own application of market definitions, served to protect incumbents and reduce economic competition—all at the expense of small businesses and the public.

A similar scenario has developed around the issue of network neutrality. Powerful telecommunications and cable corporations are telling Congress and the FCC that they need to be able to charge content providers for the use of their networks. Once again industry incumbents are asking policymakers for regulations and legislation that secures greater compensation for them at the expense of small businesses and the public. In this way, radio remains the canary in the coalmine.[24] Its experience with extreme consolidation can suggest paths we should avoid with internet and wireless technology.

Information industries like radio are vital to our culture, our democracy, and our economy. Together the information industries (software, telecommunications, television, movies, and

[23] See, for example, CNet articles at http://news.com.com/Net+neutrality+showdown/2009-1028_3-6055133.html (last visited November 28, 2006).

[24] FCC Commissioner Michael Copps has also used this metaphor. See Jonathan Lawson, "Fixing Radio," *Reclaim the Media*, February 28, 2005, *at* http://reclaimthemedia.org/radio/fixing_radio (last visited December 7, 2006).

so on) have grown to about 5 percent of total U.S. gross domestic product, nearly doubling in share since World War II,[25] and are among the few U.S. industries to enjoy a positive trade balance. Research about how information companies and information industries behave, like the research contained in this report, is therefore highly valuable. Even in a time of new technologies, studying radio remains essential.

Industry Research and Access to Data

Over the past two decades, radio companies have sought "regulatory relief" in the face of allegedly declining business prospects. In addition to—or, in some cases, instead of—developing new radio programming and other new services for listeners, radio companies have asked Congress to change the rules in ways that benefit them as incumbents. That is, one benefit for radio companies of gaining unprecedented size was dominance over any potential new entrants to the radio industry. Larger companies can hold more sway over advertising customers as well as suppliers of programming, such as musicians.

Federal administrative law requires that research back up any FCC decisions about adopting, modifying, or changing rules that affect incumbent radio companies. The FCC itself maintains a research staff to perform some research from an ostensibly neutral perspective. But the radio industry submits dozens of research reports each time the FCC has a proceeding to advocate for their perspective.

There are endemic problems to much of the research involved in this process. Both the FCC's and the industry's research are based on the same data, which are collected by and belong to the industry. Only variables that the industry sees fit to measure get measured. Only questions that the industry sees fit to ask get asked—unless public-interest groups fill the gap. To conduct our research, we have to purchase proprietary data sets from the industry, often the same data sets used by the FCC itself. With careful critical analysis, we make the most of these flawed, incomplete, and expensive data. But throughout this report we will emphasize the importance of disinterested research to the FCC's policy-making process and the need for enhanced collection of and access to radio data.

Summary

The public park that is our radio airwaves remains endangered by consolidated control. We hope to save the park for the public's enjoyment by telling its story and by suggesting how we can properly maintain its value. Radio—still a miraculous, inexpensive, ubiquitous, and valued technology—is worth saving.

[25] Only the financial sector has grown faster than the information sector of the U.S. economy. See Bureau of Economic Analysis, "Gross-Domestic-Product-by-Industry Accounts, 1947-2005," *at* http://bea.gov/bea/industry/gpotables/gpo_list.cfm?anon=645 (last visited November 28, 2006).

If measured by the three long-standing goals of competition, localism, and diversity, the experiment with radio consolidation launched by the Telecommunications Act of 1996 was a policy failure. Chapter 1 shows the loss of competition in radio nationwide. Chapter 2 documents the accompanying loss of local ownership over the last decade. Chapter 3 highlights the lack of diversity on commercial radio and from large station groups.

If there is a silver lining to this cloud of failed oversight, it will be the lasting lessons that are already being applied in the debate over network neutrality and structural decisions about the internet marketplace. Radio's story has played a major role in spawning the movement against media consolidation. And concerns about access to the data used in the FCC's decision-making process have clarified the need for more substantial and transparent information to monitor media industries. Never again should these decisions be made in the dark. With this study we aim to shed some light.

We start with the history of radio consolidation from a nationwide perspective.

Chapter 1
National Radio Consolidation

Radio listeners—and most Americans are radio listeners—have seen the radio industry transformed over the past decade. Standardized programming formats like "KISS-FM" and syndicated shows like Glenn Beck have become even more widespread. Music radio, which has always been hit-driven, now features songs picked by national programming directors instead of local program directors and DJs. Commercials now consume more of the typical radio broadcast. But at the same time, more listeners have tuned out. And thousands of independent, local radio station owners have sold their stations to national chains. In 1995 there were just over 6,600 different owners of radio stations. By 2005, that number had fallen by one-third, to just over 4,400.

These changes to the radio landscape can be traced to the Telecommunications Act of 1996, or the Telecom Act. In that piece of legislation, Congress relaxed local restrictions on radio-station ownership and eliminated the national ownership cap entirely. Radio companies had lobbied hard for this bill, telling Congress that, in a competitive media marketplace, they needed to be able to take advantage of economies of scale to survive. But, they also suggested that being allowed to purchase more stations would also allow them to program more diverse programming for listeners. One senator argued that radio companies needed deregulation "to allow them to compete in the new digital marketplace" and "to provide the best possible service to listeners."[1] This law is to blame, however, for increasing concentration of ownership in the radio industry—with no demonstrable benefits for citizens and radio listeners.

The Telecom Act changed the radio industry profoundly. For decades, the FCC had placed a cap on the number of radio stations one company could own in the United States. With the Telecom Act, Congress removed the cap entirely. The elimination of the national cap transformed U.S. radio in several ways. The following are among the most crucial:

- **Fewer radio companies:** The number of companies that own radio stations peaked in 1995 and has declined dramatically over the past decade. This has occurred largely because of industry consolidation but partly because many of the hundreds of new licenses issued since 1995 have gone to a handful of companies and organizations.
- **Larger radio companies:** Radio-station holdings of the ten largest companies in the industry increased by almost fifteen times from 1985 to 2005. Over that same period, holdings of the fifty largest companies increased almost sevenfold.

[1] Statement of Senator Conrad Burns, Senate Committee Report 104-023: Telecommunications Competition, *available at* http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp104&sid=cp104uo5cr&refer=&r_n=sr023.104&item=&sel=TOC_204865&.

- **Increasing revenue concentration:** National concentration of advertising revenue increased from 12 percent market share for the top four companies in 1993 to 50 percent market share for the top four companies in 2004.
- **Increasing ratings concentration:** National concentration of listenership continued in 2005—the top four firms have 48 percent of the listeners, and the top ten firms have almost two-thirds of listeners.
- **Declining listenership:** Across 155 markets, radio listenership has declined over the past fourteen years for which data are available, a 22 percent drop since its peak in 1989.

This study extends and expands on Future of Music Coalition's 2002 study, *Radio Deregulation: Has It Served Citizens and Musicians?* Like the previous study, it is an attempt to understand the way dramatic changes to the structure of the radio industry have affected the public, with special attention paid to the impact on musicians. This study contains not only new statistics from the past four years, but also newly available historical data, which make it possible to examine three decades' worth of information. This broader historical approach vividly documents the unprecedented changes that have occurred in the radio industry since 1996.

Chapter 1 takes a nationwide look at the radio industry. It first describes the legal changes that have occurred in radio, and then provides a statistical look at topics like how the FCC issues new radio licenses, how the FCC regulates station ownership, changes in the concentration of market share, and trends in radio listening. Chapter 2 and Chapter 3 will cover the important issues of local radio markets and changes in programming formats.

A Brief History of the FCC and Radio Regulation

This section puts the passage of the Telecom Act in context, explaining:

- How the FCC's broadcast license process acts as a *de facto* restriction on entry into the radio industry;
- How the FCC gradually increased the local ownership cap and how Congress eliminated the national ownership cap in 1996; and
- What economic theories motivated the "deregulation" of the 1980s and 1990s—and why the assumptions required for those theories do not hold true in the radio industry.

The FCC as Regulator of the Radio Industry

When you hear about the Federal Communications Commission (FCC), you may think about a government regulatory agency enforcing indecency regulations: radio shock jocks getting fined, the flap over the Janet Jackson incident at the Super Bowl, or the prohibition on using curse words on the air. Or, if you are a bit older, you might think about the FCC enforcing something called the Fairness Doctrine, an FCC regulatory policy that guaranteed equal broadcast time for different political perspectives (and was repealed in the 1980s). This report will discuss the FCC in a different way than you might be accustomed to—as an

enforcer of limits on ownership. Instead of indecency or political balance, this report will focus on how FCC policy influences which types of radio companies can participate and thrive in the current media environment.

The FCC affects the business of radio by limiting what the companies that own radio stations can do. For example, the FCC can use rules or regulations to limit the number of radio stations that one company can own. These types of limits have existed for a long time and have their roots in many different political goals. Some politicians and citizens in the U.S. have long been concerned that ownership of too many media outlets would lead to too much political power in the hands of a single company, a company which could either threaten or align itself with the government to the detriment of democracy. Other politicians and citizens believe that small, local companies will better respond to the public's desires for entertainment and news. From these concerns came the FCC's three policy goals for broadcast, including radio: **competition** (having many firms in the industry), **diversity** (in terms of programming, ethnic perspectives, and political viewpoints)**,** and **localism.**

The FCC's Licensing Process and Its Economic Consequences

Among its many powers, the FCC decides who receives licenses to broadcast radio. The FCC manages this process partly to prevent radio stations' signals from interfering with each other. Known as the "scarcity rationale," this theory conceives of the radio frequency spectrum as a scarce resource in which only a limited number of signals can coexist while still being heard. The FCC has a responsibility to maximize the usage of this scarce resource without depleting its functionality. What good are twice as many stations on the air if the signals are overlapping to the point of distortion? The FCC is the arbiter of this delicate balance. Some technologists have disputed the scarcity rationale for technical and other reasons, but for the purposes of this report our focus is on the considerable *economic* impact of the FCC's power to control the number of radio stations that can coexist in a local market.

The FCC's power to act as an economic regulator via this localized licensing process has fundamentally shaped the radio industry.

Imagine that the federal government set up a regulatory agency to issue permits for setting up any new coffee shops in each town. That agency—call it the Federal Coffee Commission—might argue that no new coffee shops can open in cities because any new coffee shops would have to be located too close to the coffee shops already crammed onto every street corner. In such a crowded coffee environment, no single coffee shop would make enough money to survive, as the new shops cut into the old shops' profits. Finally, the Commission might say, consumers would struggle to tell the different coffee shops apart if every city block had too many of them. How can you meet your friend at the café on Main between Washington and Madison when there are seventeen cafés fitting that description?

Restricting the licenses for new coffee shops would benefit large incumbent companies like Starbucks by protecting the territory around their current coffee shops. But the policy would frustrate those hoping to open new coffee shops. And the arguments that the restrictions benefit consumers might not hold water. Profits might not decline, or might have been great

enough already for shops to survive. Consumers could perhaps tell the cafés crowded into each city block apart by their brand names. So the Federal Coffee Commission's restrictions on licenses for new coffee shops can seem either prudent or ill-conceived, depending on your political and economic views. But in any case the restrictions would be controversial. And the real FCC's rules on new radio licenses have certainly been that.

As the coffee example suggests, one major consequence of limiting the number of radio licenses is that it protects the companies that already own stations—the incumbent radio companies. The FCC's licensing process is an **entry restriction** or a **regulatory barrier to entry**.

Entry restrictions protect incumbents from losing profits to new competitors. If an entrepreneur has an idea for a great new kind of programming, or for a lineup of syndicated programming that her community might enjoy more than the current offerings, she has three main options. She will either have to: (1) purchase a station from an incumbent, (2) try to sell her idea to an incumbent, or (3) obtain a license for a new station from the FCC. Options (1) and (2) both mean that the incumbents will benefit from our entrepreneur's idea, perhaps getting most of the profits created, since the incumbent will have a stronger bargaining position. Only option (3) allows the entrepreneur to benefit fully from her own idea, since the fees for a new FCC license are nominal compared to the cost of purchasing an existing station.

In this way, the FCC entry restrictions protect incumbent companies from competition. Most of the time, new competitors either have to deal with incumbents to participate in the radio industry or they cannot enter the market at all. As a result, the FCC's decisions about how it issues licenses at the local level has had profound economic consequences on the radio industry nationwide.

Limits on How Many Stations One Company Can Own

The National Radio Ownership Rule was a regulation adopted by the FCC under the authority Congress gave to the FCC in 1934, when the Communications Act created the agency. In 1953, the FCC set the national cap at 14 stations: no company could own more than 7 AM stations or 7 FM stations. Thus, radio stations in the U.S. were owned by a very large number of companies. Radio was a highly **unconcentrated** industry because ownership of radio stations was so widely dispersed.

Additional FCC regulations ensured that radio stations were locally owned. While a locally owned radio station might have carried programming from a national network like NBC, such a station would traditionally broadcast locally produced programming as well. At the time, FCC regulators felt that small, local radio companies would best serve the **public interest**—a term used by Congress dating back to the Radio Act of 1927 and the Communications Act of 1934 to describe the obligations of broadcasters to serve their local communities. Thus the geographic reach of each radio company was strictly limited.

FCC regulations also contain the longstanding Local Radio Ownership Rule, which prevents one company from owning more than a certain number of stations within a local market. Chapter 2 will discuss local radio and the Local Radio Ownership Rule in detail.

Radio "Deregulation" in the 1980s and 1990s

Starting in the 1980s, the FCC began to gradually increase the national ownership cap. In 1984, the cap increased to 24 stations (no more than 12 AM or 12 FM), and in 1992 the cap increased to 36 stations (no more than 18 FM or 18 AM). By 1994, the national cap was 40 stations per company—no more than 20 AM stations or 20 FM stations, with allowances for minority-owned broadcasters to exceed the cap slightly.

The FCC relaxed the national ownership limit partly because the U.S. had many more radio stations in the 1980s than in previous decades. New technology had made it possible to allow even more stations to coexist in local markets without interference. In addition, the FCC was influenced by an economic theory specific to the broadcast industry that was (mistakenly) interpreted to suggest that an industry made up of larger companies might offer more diverse programming than an industry made up of smaller companies.[2]

In the 1990s, radio companies urged Congress to step in and relax ownership restrictions even further. They claimed that without the ability to take advantage of **economies of scale**—the idea that bigger companies can cut per-unit costs—the radio industry would not survive financially. Coupled with the theoretical justifications for relaxing the national cap, the radio companies convinced Congress to eliminate it in 1996 with the passage of the Telecommunications Act. Congress also significantly relaxed the Local Radio Ownership Rule, but left it in place. (Chapter 2 focuses on the Telecom Act's effects on local radio.)

But economies of scale are not a law of nature; **diseconomies of scale** are just as likely. For some industries, larger companies can produce goods or services more efficiently. But in other industries, smaller companies are more efficient. Furthermore, companies becoming larger in order to cut their unit costs does not benefit consumers unless the good or service being produced retains the exact same quality. Otherwise the benefits of lower unit costs must be weighed against the harms of inferior products. Thus the theoretical benefits of economies of scale in radio industry would not exist if the quality of programming declined as companies grew larger.

Another major reason for increasing—and ultimately eliminating—the national cap was ideological. With the Reagan administration came a "deregulatory" philosophy that disfavored restrictions on what businesses could do. This policy was influenced by the simple economic theory that markets devoid of government intervention best serve the public interest.

[2] See Peter DiCola & Kristin Thomson, *Radio Deregulation: Has It Served Citizens and Musicians?* (2002), pp. 8-14.

Unfortunately, many of the simplifications required for the free-market economic theory to hold do not apply at all to the radio industry. For instance, the Telecom Act removed the national ownership cap but left the FCC's entry restrictions in place. Without free entry to spur active competition between companies, the benefits of free markets to consumers may not occur. Instead, raising the caps while continuing to restrict licenses meant that the FCC was mainly protecting incumbent companies at the expense of new entrants—and radio listeners.

New Radio Licenses

To provide some beginning context for understanding the radio industry by the numbers, this section details how:

- New radio licenses continue to be issued, but at a slower pace than in previous decades, demonstrating the lack of free entry into the radio business.
- Many of the licenses have gone to a small group of owners, and as a group, new licensees are increasingly focused on Christian programming.
- Entry restrictions mean that radio is not a free market, and that "deregulation" was instead pro-incumbent regulation.

New Radio Licenses Are Hard to Come By

How hard is it to get a license for a new radio station from the FCC? Obtaining a license has traditionally been a difficult, years-long, and highly competitive process. The FCC has always decided how many new radio licenses to grant each year, and continues to do so. But since 1996, the FCC has allocated these new licenses by auctions for commercial stations and by a points system for noncommercial stations. The FCC now gets about 30,000 inquiries annually from prospective licensees, yet the FCC only grants about 200 new licenses nationwide each year. And the FCC has granted new licenses at a decelerating rate over the past decade. As Table 1-1 shows, the FCC granted only 177 new licenses per year from the end of 1995 through the end of 2005.[3]

[3] Source data: Media Access Pro, BIA Financial Networks, data as of November 2005. These figures do not correspond exactly to the figures available on the FCC's website; the differences depend on whether stations are considered to exist when licensed or when they have actually constructed their radio tower and begun broadcasting. The figures from the BIA database are preferable because they extend back to 1975, whereas the FCC's published figures only date back to 1990.

Table 1-1. Number of FCC-Licensed Stations from 1975 to 2005 and the Rate of New Licenses per Year over Each Decade.

Year	Total Number of Licensed Stations (AM and FM)	New Licenses per Year Over Previous Decade
1975	7,472	---
1985	9,450	198
1995	11,734	228
2005	13,504	177

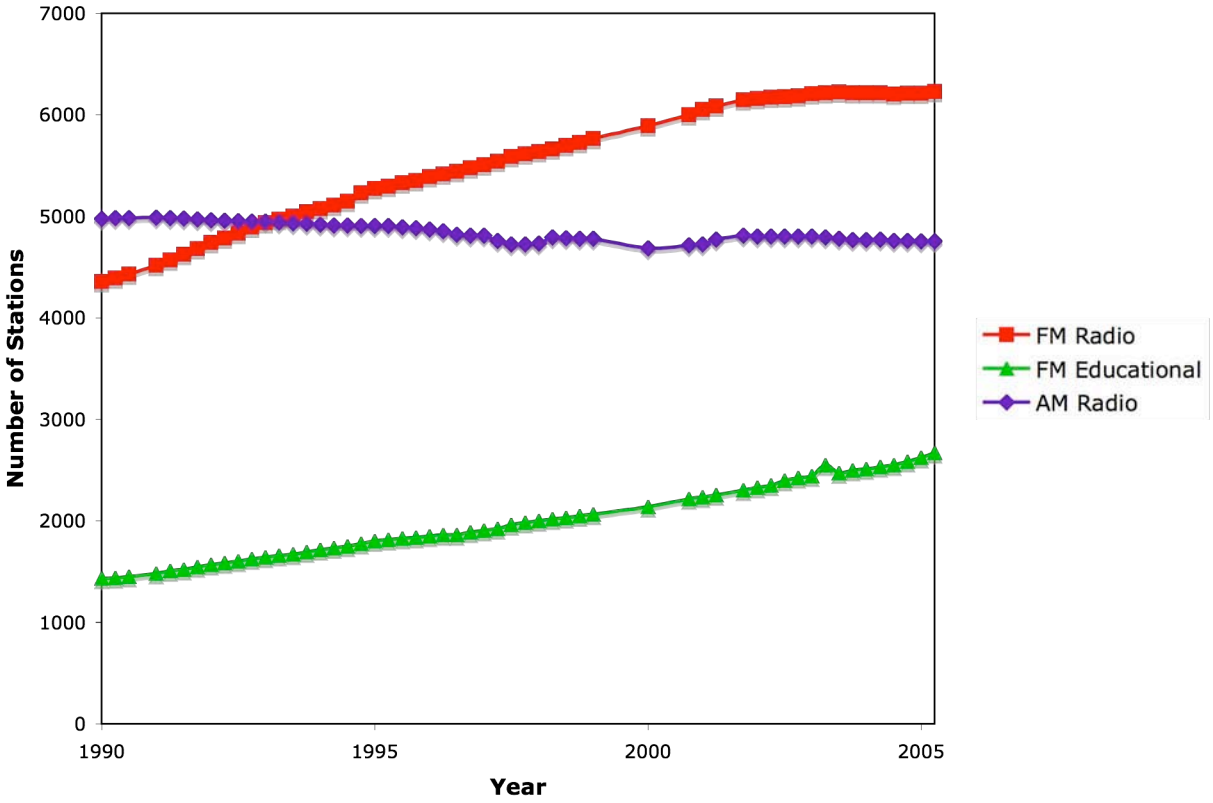
Radio licenses from the FCC are specific to an AM or FM frequency. Licensees must apply to the FCC to change frequencies or to increase the power or height of their broadcast tower (which both determine how far a station's signal reaches). Radio licenses also come with a classification of either commercial or noncommercial. The main difference is that the FCC prohibits noncommercial stations—also called "educational" stations—from broadcasting advertisements.

Figure 1-1 shows the total number of FM, FM-educational, and AM stations from 1990 to 2005.[4] During this period, the number of both commercial and noncommercial FM licensees grew, while the number of AM licenses decreased slightly. This decline in the number of AM stations may have occurred because stations went off the air or perhaps because licensees requested to switch from AM to FM. The percentage growth in FM-educational licenses was larger than that of commercial FM licenses. AM-educational licenses are rare and are not broken out in the FCC's numbers.

The data used to construct Figure 1-1 come from the FCC itself. These are, in fact, the only data on radio station ownership made available through the FCC's web pages. But it would be a stretch to say that even these data are *readily* available, since it required data from 55 separate pages to construct Figure 1-1. And these data don't tell you who owns the stations, or where the stations are—they only tell you how many stations have been licensed in total across the country. It's possible to download the many parts of FCC's complex relational database, which contains much more detailed engineering and ownership data. But the average citizen (or even the average researcher) cannot make much use of it without hours of work and lots of guidance.

[4] Source data: Federal Communications Commission (FCC), Licensed Broadcast Station Totals in the USA—1990 to Present, *at* http://www.fcc.gov/mb/audio/totals/index.html (last visited May 2nd, 2006).

Figure 1-1. AM, FM, and FM-Educational Stations, 1990-2005.



It is unfortunate that critical data is not available in a form that would allow citizens to understand the transformation of the radio industry. Only by purchasing expensive and proprietary data sets can one begin to track the changes that have transpired in radio with quantitative methods. It is also unfortunate that the majority of the more comprehensive data sets come from the industry itself. As a result, researchers and policy makers must evaluate the industry on the industry's own terms, based on the measures it chooses to create and distribute.

Thus, from here onward, this chapter (and this report) will mainly rely on data from industry sources. These data are proprietary and expensive, but can answer many more questions than the FCC's data. Primarily, this chapter will rely on information from Media Access Pro, a database created by BIA Financial Networks with information collected by surveying radio companies themselves.

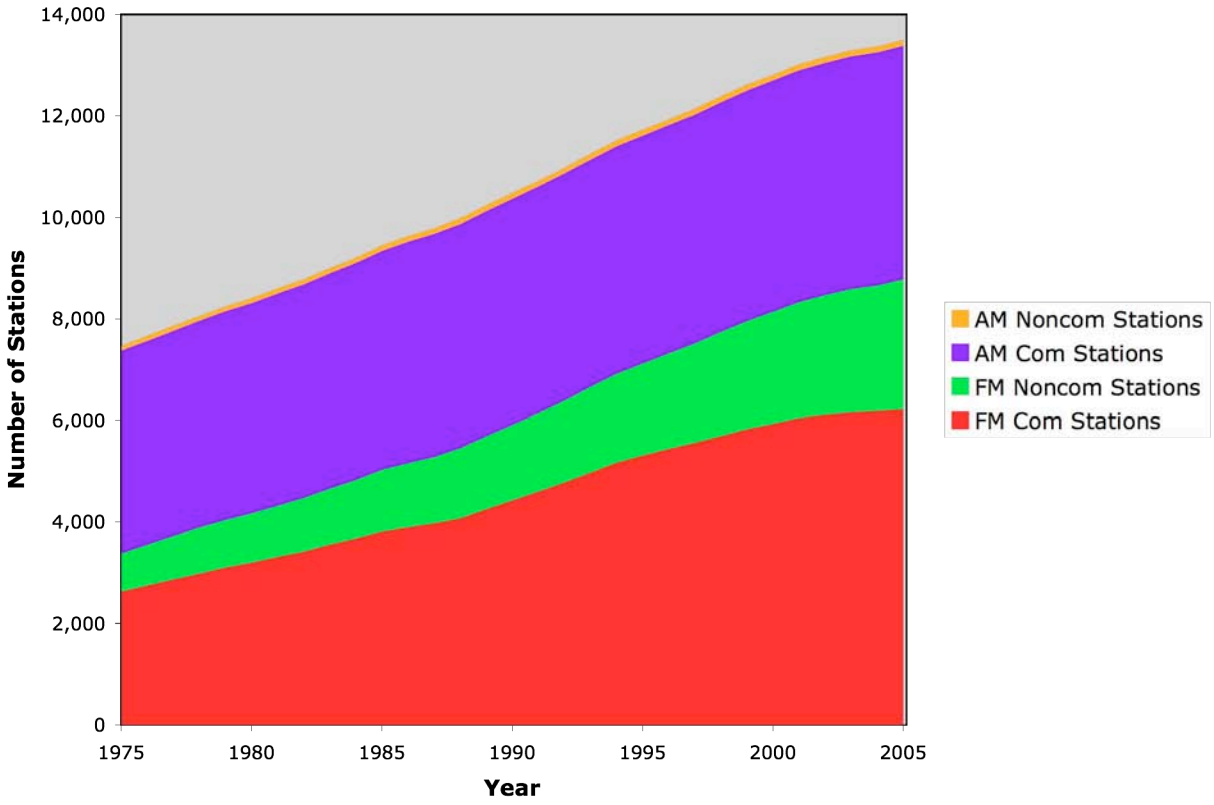
The Total Number of Radio Stations in the U.S.

Figure 1-2 shows a longer history of the number of licensed radio stations in the U.S., broken down into four categories by AM vs. FM and by commercial vs. noncommercial.[5] In Figure

[5] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

1-2, unlike Figure 1-1, each category of stations is represented by an area, not just a line. These areas are then stacked on top of one another, so that the chart also shows the total number of stations in the U.S.—just over 13,500 stations at the end of 2005. Currently there are over 8,700 FM stations and over 4,700 AM stations. Among the FM stations, about 6,200 are commercial stations and about 2,500 are noncommercial (or educational). Among the AM stations, only 119 of them are noncommercial, leaving just under 4,600 commercial AM stations.

Figure 1-2. FCC-Licensed Stations, 1975 to 2005.



The message of Figure 1-2 is largely the same as that of Figure 1-1: new licenses have been going almost entirely to FM stations in recent years. But going back to 1975 provides a broader context for understanding the changes to radio of the last decade. Information for particular variables is not always available going that far back, even in the proprietary databases. Whenever possible, however, the analyses of this chapter will cover a three-decade span.

More importantly, Figures 1-1 and 1-2 show that the total number of radio stations in the U.S. is indeed growing. But a large portion of the growth involves noncommercial FM stations. With only a few dozen commercial FM stations receiving new licenses each year, entry into commercial radio is quite restricted. The average metropolitan area has only seen

a new commercial FM station once every three or four years. As a result, incumbent radio companies do not face new competitors very often.

Who's Getting the New Licenses

New licenses can create the opportunity to bring new individuals and organizations into the radio industry. These new licensees could bring fresh perspectives that would result in new programming to serve the diverse public interest. This becomes even more important in the context of consolidating ownership, as the incumbent companies get larger and the diversity of station ownership declines. (Chapter 3 will discuss the programming choices of large incumbents versus those of small companies and new entrants.)

So who are the new licensees in radio? Over the past ten years, a fairly large percentage of the new licenses have gone to just a few companies, as Table 1-2 describes.[6]

Table 1-2. Owners of Newly Licensed Radio Licenses, 1996-2005.

Owner	Number of Stations	Percentage
American Family Association	115	6.9%
Educational Media Foundation	51	3.1%
Calvary Satellite Network Int'l	26	1.6%
Flinn Broadcasting Corp.	15	0.9%
Family Stations	13	0.8%
Clear Channel Communications	12	0.7%
University of Wyoming	11	0.7%
Moody Bible Institute of Chicago	11	0.7%
Baker Family Stations	11	0.7%
New Life Evangelistic Center	9	0.5%
All others (1,062 different owners)	1,383	
TOTAL	**1,657**	**---**

The 115 stations licensed to American Family Association and the 51 stations licensed to the Education Media Foundation over the past ten years add up to 10 percent of the newly licensed stations, across AM and FM, commercial and noncommercial. Ten percent may not seem like an overwhelming number. But consider that when American Family Association receives 115 licenses (instead of, say, one), 114 other individuals, companies, and organizations do not get a license.

FM Translators and Satellite Feeds

Many of the leading acquirers of new noncommercial radio licenses have also taken advantage of *FM translator stations.* A translator receives signals from a full-power FM station and rebroadcasts that signal at a low power (250 watts or less). Some translators "fill

[6] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

in" signals to parts of a full-power FM station's designated broadcast area that are blocked by mountains or other features of the terrain, while others extend a full-power station's broadcast area. There are no ownership restrictions on translators; specifically, the ownership restrictions that apply to full-power radio stations do not apply to translators.[7]

In 1990, the FCC changed the rules for how FM translator stations for noncommercial full-power FM stations could receive their signals. Before, translators had to receive their signal via terrestrial means, for example microwave, phone lines, or cable lines. But with the 1990 rule change, FM translators for noncommercial full-power FM stations could receive their signals via satellite.[8] To receive a license, FM translators still must have an association with a full-power FM station. But the ability to deliver signals by satellite made translators more attractive. And media-ownership limits have never applied to translators; an entity can apply for as many translators as it wants. Many noncommercial broadcasters—including the major acquirers of new noncommercial FM licenses like American Family Association, Educational Media Foundation, and Calvary Satellite Network—have accumulated many translators to go with their new full-power FM licenses.[9] These translators do not have to be in the same local market as their parent FM station. Their FM translators can now rebroadcast satellite feeds of those organizations' programming, multiplying the impact of their new full-power licenses.

The companies and organizations that have obtained new radio licenses since 1996 have handled the application process skillfully, whether through auctions for commercial stations or through the points system for noncommercial stations. They have also taken advantage of the relaxed rules for how FM translators receive their signals. Taken together, the changes to the licensing process and the changes to the translator rules have increased consolidation in non-commercial radio. As a result, these changes might threaten competition, diversity, and localism and are cause for concern.

Low-Power FM Stations

Low-power FM stations are one mitigating factor in the increasing concentration of existing and even newly licensed full-power radio stations. Broadcasting with a power of 100 watts or less, these low-power station licenses are available only to noncommercial entities without other broadcast or newspaper holdings. Licenses for low-power FM stations first became

[7] Federal Communications Commission, "FM Translator and FM Booster Stations," *at* http://www.fcc.gov/mb/audio/translator.html.
[8] Federal Communications Commission, Amendment of Part 74 of the Commission's Rules Regarding Translator Stations, MM Docket 88-140, FCC 90-375, 5 FCC Rcd 7212 (1990), *available at* http://www.fcc.gov/fcc-bin/assemble?docno=901204.
[9] For documentation that these entities employ an FM-translator strategy, and a discussion of other issues related to FM translators in general, see DIYMedia.net, "God Squads Fall From Grace," *at* http://www.diymedia.net/feature/lpfm/f022505b.htm.

available in January 2000.[10] As of June 30, 2006, the FCC's database indicated that 728 low-power FM stations were operational and that 341 more had obtained construction permits.[11]

Congress has limited the number of frequencies available for low-power FM stations. By statute, the FCC may only grant low-power FM stations at frequencies that are more than three frequencies away from any current full-power licensee's frequency (counting by increments of 0.2 MHz, as the FCC does when allocating spectrum). For example, if a full-power FM station is broadcasting at 91.5 FM in a particular city, then no low-power FM station can be licensed at 90.9, 91.1, 91.3, 91.7, 91.9, or 92.1.

The stated purpose of this "third adjacent channel" rule is to protect full-power licensees' broadcast signals from interference. But an engineering study commissioned by the FCC and conducted by the MITRE Corporation concluded that such concerns are unfounded—especially at a distance of three frequencies.[12] As a result, the restrictions on low-power FM licenses provide another example of entry restrictions. Congress is not protecting the integrity of full-power licensees' signal. Rather, the FCC is protecting incumbents from competition from local, independently owned low-power FM broadcasters.[13]

Not Deregulation, but Pro-Incumbent Regulation

The statistics in this section make plain that "deregulation" is a deceptive misnomer for what happened in radio in the 1980s and 1990s. Strong regulations on entry still exist in radio. The vast majority of would-be competitors do not obtain radio stations. Regardless of whether concerns about interference justify the FCC's entry restrictions, the economic effect is to make the radio industry an exclusive party that only two hundred new invitees per year can attend. Entry restrictions benefit incumbents, protecting them from the vagaries of true competition and facilitating their efforts to acquire an increasingly large fraction of all U.S. radio stations—as the next section describes.

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[10] Federal Communications Commission, "Low Power FM Broadcast Radio Stations," *at* http://www.fcc.gov/mb/audio/lpfm.

[11] Federal Communications Commission, "FM Query Results," http://www.fcc.gov/fcc-bin/fmq?state=&serv=FL&vac=&list=2 (visited June 30, 2006) (clicking the link begins a query of the FCC's engineering database that will deliver current results on all low-power FM station).

[12] According to Media Access Project, The Mitre Report found that: [1] eliminating third adjacent channel separation would not increase interference[; 2] LPFM would have no impact on digital radio[; and 3] there was therefore no need to consider the economic impact of LPFM on incumbent broadcasters." See Media Access Project, "Congress and LPFM," available at http://www.mediaaccess.org/programs/lpfm/Congress.html (last visited August 25, 2006). The Mitre Report itself is available at http://www.freepress.net/lpfm/MitreReport.pdf (last visited August 25, 2006).

[13] As of this writing, the Senate Commerce Committee had voted in support of an amendment to a large telecommunications bill that would allow the FCC to grant more low-power FM licenses. For updates, and for much more information on low-power FM radio, visit the website of the Prometheus Radio Project at http://www.prometheusradio.org/.

When the Telecom Act Changed Everything

This section documents how:

- The Telecom Act resulted in an unprecedented wave of mergers and acquisitions.
- The number of companies that own radio stations peaked in 1995, just before the Telecom Act, and has declined dramatically over the past decade, despite hundreds of new licenses issued.
- Most of the decline in the number of owners occurred among owners of commercial stations.
- The number of owners of noncommercial stations, however, has only increased slightly since the Telecom Act.

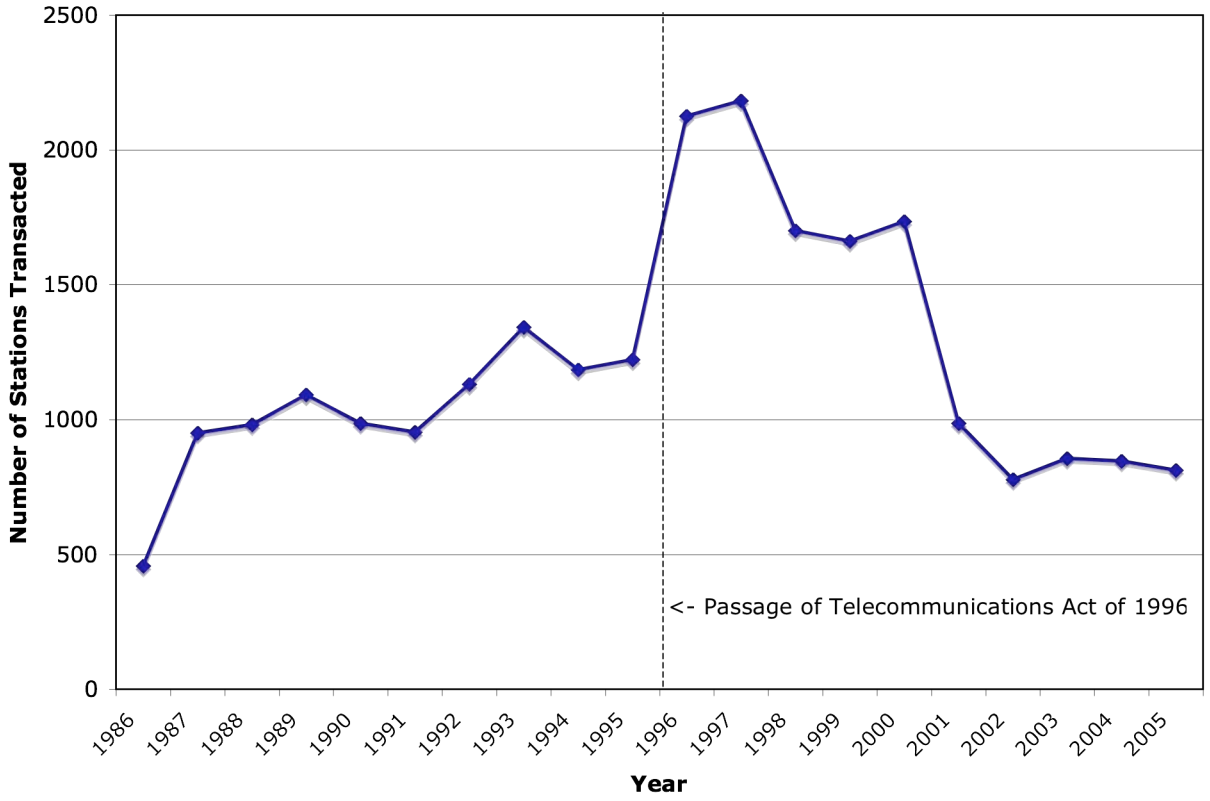
Mergers and Acquisitions in the Wake of the Telecom Act

Powerful radio companies had much to do with passing the Telecom Act, and they prepared for its coming by planning for various mergers and acquisitions so that stations could start changing hands immediately after the law passed. These transactions took advantage of the radio companies' new ability to become national, rather than just local or regional, media companies. Radio stations have always switched owners from time to time—FCC regulations do not prohibit transfers of licenses, though transfers must be reported. But the Telecom Act unleashed an enormous number of mergers and acquisitions, as Figure 1-3 shows.

Figure 1-3 does not count the number of deals in each year; rather, it shows the number of stations that changed hands each year.[14] So, for example, a deal involving one station would count as one station transacted. A merger between a radio company with 100 stations and a radio company with 50 stations would count as 50 stations transacted. Graphing the number of stations transacted over time gives us a way to analyze the level of merger and acquisition activity in each year.

[14] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 1-3. Number of U.S. Stations Transacted in Mergers and Acquisitions, 1986-2005.



Before 1992, the number of stations changing hands was typically around 1,000 stations per year. Between 1992 and 1996, that number increased to around 1,200 per year. Then, as Figure 1-3 shows, merger and acquisition activity spiked upward. During 1997 and 1998, the two years immediately following the Telecom Act, over 2,100 stations were transacted each year. From 1999 through 2001, around 1,700 stations changed ownership each year, still above pre-Telecom Act levels. Since 2002, however, the number of stations transacted each year has settled down to around 800 stations per year.

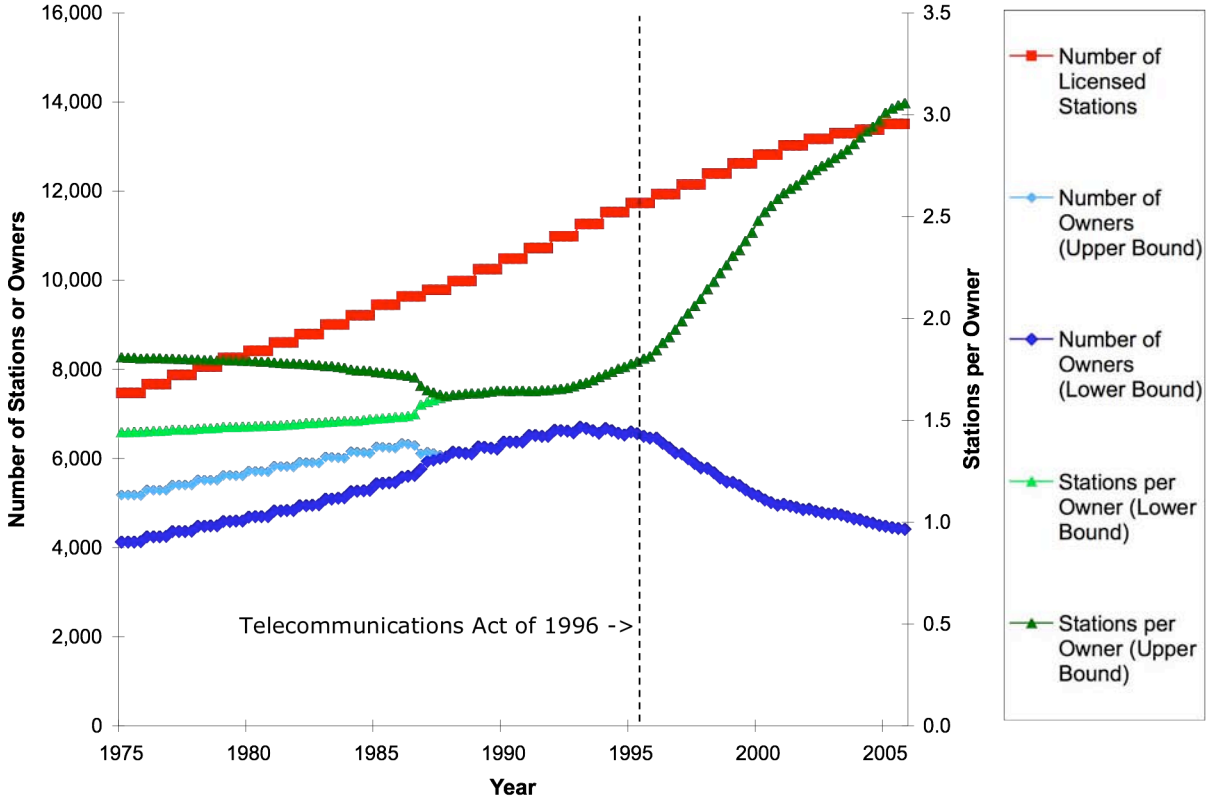
A Growing Number of Stations—And a Shrinking Number of Owners

The large number of mergers and acquisitions that occurred in the wake of the Telecom Act illustrates that the elimination of the National Radio Ownership Rule restructured the radio industry. Figure 1-4 charts the number of FCC-licensed stations against the number of owners of radio stations.[15] The red line charts the total number of stations in the U.S.—this just repeats the top outline of Figure 1-2. The blue line represents the number of owners over the same time period. The green line represents the number of stations per owner—the red line divided by the blue line.

[15] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

For the years 1975 through 1987, the blue line and the green line split into two. The transaction data from BIA Financial Networks are incomplete for these years. We know who purchased the stations, but we don't always know who sold them. The "upper bound" on the number of owners represents what the number of owners would be if every single seller whose identity is unknown was an independent owner with just a single station to sell. The "lower bound" on the number of owners represents the opposite, that is, what the number of owners would be if every single seller whose identity is unknown was an owner of multiple stations and continued to own other stations after the sale.

Figure 1-4. U.S. Radio Stations and Owners, 1975-2005.



***Note**: Read the red and blue lines, which depict the number of stations and the number of owners, against the left-hand axis. Read the green line, which depicts the number of stations per owner, against the right-hand axis.*

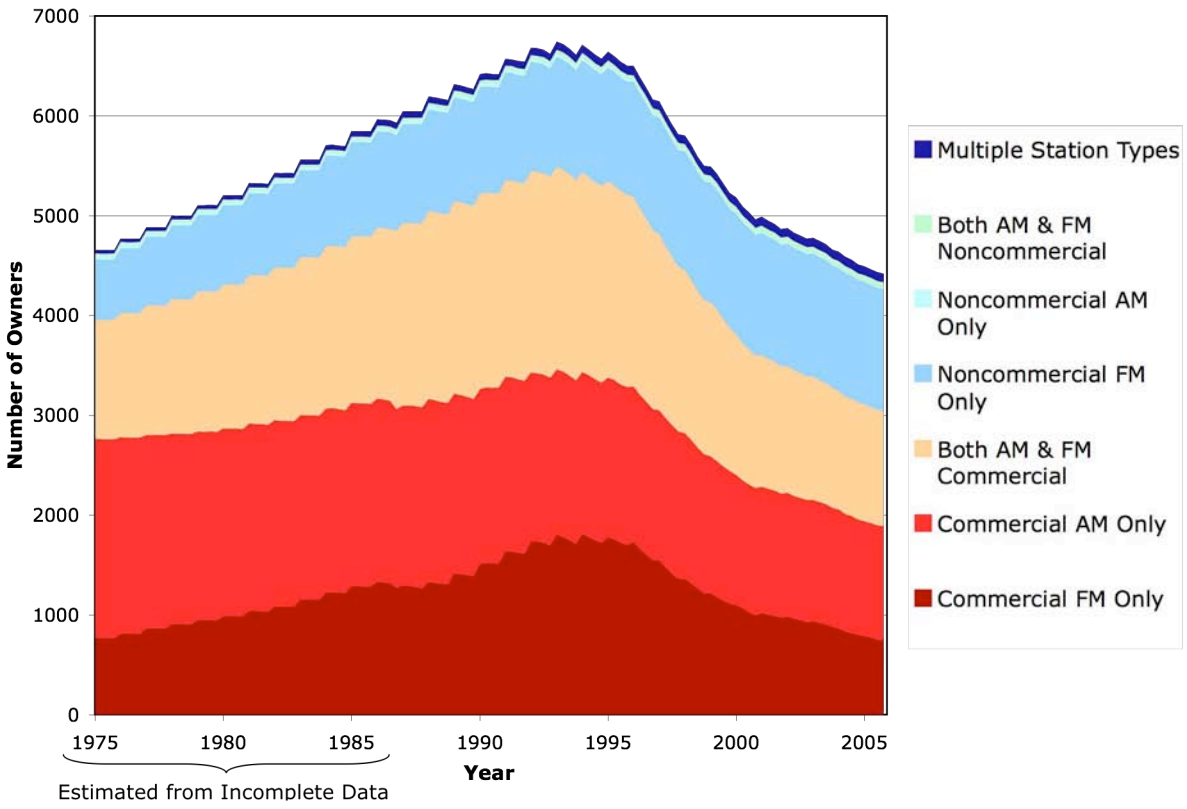
Figure 1-4 shows that the number of owners increased from 1975 to 1995. In 1975, approximately 4,000 to 5,000 distinct companies, organizations, and individuals owned radio stations in the U.S. That number gradually increased over the next two decades as the FCC licensed new stations, some of them to owners who had not previously owned any radio stations. But the number of owners peaked in early 1995 at just over 6,600 owners. This includes owners of all station types: AM and FM, commercial and noncommercial. After that peak, mainly after the Telecom Act, the number of owners declined precipitously, as the

blue line shows. At the end of 2005, the radio industry had just over 4,400 owners. The green line in Figure 1-4 shows that the number of stations per owner increased from about 1.75 to about 3.05 over this time period.

Most Mergers Happened in the Commercial Sector

Figure 1-5 takes the blue line from Figure 1-4, which represented the number of owners over time, and breaks the owners into seven categories: (1) those who own only commercial FM stations, (2) those who own only noncommercial FM stations, (3) those who own only commercial AM stations, (4) those who own only noncommercial AM stations, (5) those owning both commercial FM and commercial AM stations, (6) those owning both noncommercial FM stations and noncommercial AM stations, and (7) those owning a more complicated mix of stations (for example, both commercial and noncommercial FM stations).[16]

Figure 1-5. Owners Categorized by Type of Stations Owned, 1975-2005.



The bottom three red-tinted areas of Figure 1-5 grow until the mid-1990s and then shrink. This shows that consolidation has occurred mainly in the commercial sector, because the number of owners who own commercial FM, commercial AM, or both commercial FM and

[16] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

commercial AM stations has declined since the Telecom Act. From a peak of 5,529 owners of commercial stations in early 1993, the number of owners of commercial stations declined to a three-decade low of 3,134 by the end of 2005. That constitutes a 43 percent drop in the number of distinct companies, organizations, and individuals who own commercial radio stations in a little less than thirteen years.

Consolidation has occurred in the noncommercial sector as well. The number of owners of noncommercial stations exceeded 1,300 in early 1996, peaked at 1,393 in early 2003, and has decreased only slightly (to 1,369) since then.[17] That the number of noncommercial owners has held steady for a decade between 1,300 and 1,400—despite hundreds of new noncommercial licenses granted by the FCC over that time period—demonstrates two forces at work. First, some consolidation has occurred in the noncommercial sector since the Telecom Act. Second, as described earlier, a greater fraction of new licenses has gone to owners who already owned at least one, if not many, radio stations.

Concentration of Station Ownership

This section looks at three decades of data to show that:

- The geographic reach of the largest radio companies has expanded over the last decade, suggesting a decline in locally owned broadcasting.
- Radio-station holdings of the ten largest companies in the industry increased almost ninefold from 1995 to 2005. Over that same period, holdings of the fifty largest companies increased more than fourfold.
- The largest radio company, Clear Channel, owned about 1,200 stations nationwide as of the end of 2005.[18]

The Geographic Reach of the New Large Radio Companies

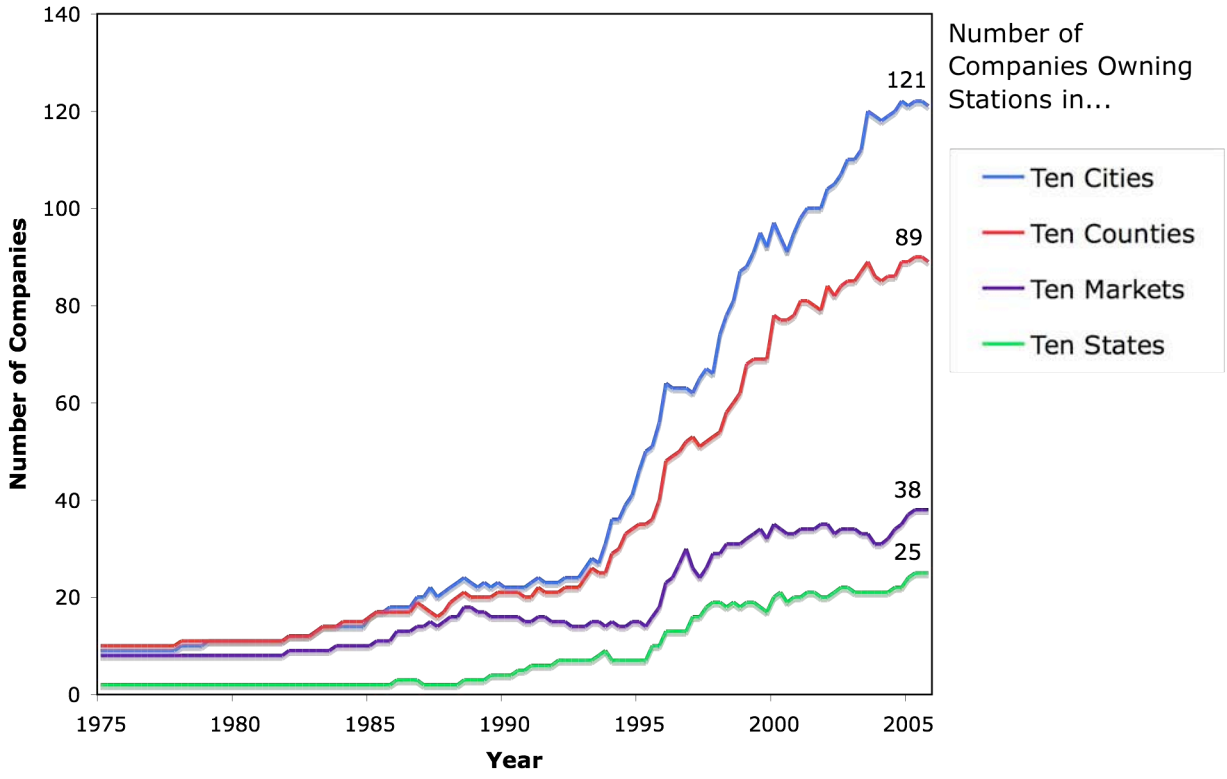
The previous section showed that a wave of mergers and acquisitions following the Telecom Act resulted in fewer entities having ownership of radio stations, and that most consolidation happened in the commercial sector. This section explores in more detail how consolidation of station ownership has changed the radio industry. Consolidation did not happen evenly among radio companies—it was not the case that each commercial company just bought one local competitor's stations, and left it at that. Rather, from the post-Telecom Act consolidation emerged national radio companies with broad geographic reach. And some radio companies came to own many more stations than others.

[17] The blue-tinted areas in Figure 1-5 represent noncommercial owners; those areas have approximately the same top-to-bottom height for the years 1996 through 2005.

[18] As discussed in the Introduction, Clear Channel announced in November 2006 that it would be purchased by a pair of private equity investors, Bain Capital Partners and Thomas H. Lee Partners. Angela Moore, "Clear Channel Agrees to $18.7 Billion Buyout," *Marketwatch.com*, Nov. 27, 2006 (corrected version). We address the implications of this buyout below.

To study the geographic reach of a radio company, one can look at many different levels of geography within the U.S. We will focus on four different geographic levels: states, markets, counties, and cities, listed from largest to smallest. Among these terms, the "market" level may be unfamiliar and require some background. For purposes of this study, "market" refers to a geographic unit defined by the Arbitron Company.[19]

Figure 1-6. Geographic Reach of Radio Companies, 1975-2005.



A radio company might own stations in one or more states, one or more markets, and so on. The number of states, markets, counties, or cities in which a radio company owns stations provides a measure of that radio company's geographic reach. To look at the geographic reach of companies across the entire radio industry, one can ask how many companies owned stations in say, 10 states or more, in 10 markets or more, and so on. Figure 1-6 displays the answers to precisely these questions.[20]

[19] Arbitron surveys radio listeners in about three hundred "markets" in the U.S. to rate stations according to estimates of how many people listen to them. Arbitron markets correspond roughly to metropolitan areas. Defining the geographic boundaries of a market allows people within the radio industry to talk about a station like WXRT's ratings in the "Chicago market." The Chicago market as defined by Arbitron isn't limited by Chicago's city limits—in fact, the Arbitron market for Chicago includes Cook County (which contains Chicago) as well as adjacent counties (or parts of them).

[20] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

As of 1975, before the regulatory changes of the 1980s and 1990s, Figure 1-6 shows that: only 2 companies owned stations in ten different states; only 8 companies owned stations in ten markets; only 10 companies owned stations in ten counties; and only 9 companies owned stations in ten cities. The number of radio companies with a wide geographic reach expanded gradually over the next two decades or so, until the FCC relaxed the National Radio Ownership Rule in 1992 and 1994. At that point, both the number of companies with stations in ten counties and the number of companies with stations in ten cities began to grow (the top two lines in Figure 1-6).

Since the Telecommunications Act of 1996, the number of radio companies with wide geographic reach has grown considerably, as measured by all four geographic levels included in Figure 1-6. At the end of 2005, an unprecedented 121 companies spanned at least ten cities; 89 companies spanned at least ten counties; 38 companies spanned at least ten markets; and 25 companies spanned at least ten states.

Clear Channel and the Dramatic Growth of the Largest Radio Companies

The size of radio companies has increased dramatically over the past decade. Table 1-3 shows the ten largest owners as of 1995 and the ten largest owners as of 2005, as well as the number of stations owned.[21] The largest single owner of radio stations, Clear Channel, owned 1,184 stations at the end of 2005.[22]

Table 1-3. Top Ten Owners by Number of Stations Owned, 1995 and 2005.

Rank	1995 Top Ten Owners	Stations Owned	2005 Top Ten Owners	Stations Owned
1	Clear Channel	39	Clear Channel	1,184
2	Family Stations	37	Cumulus	295
3	Salem Comm. Corp.	30	Citadel	223
4	Evergreen Media Corp.	30	Infinity	178
5	Minnesota Public Radio	28	Educational Media Foundation	138
6	James Ingstad	28	American Family Ass'n	113
7	Bible Bcstg. Ntwk	28	Salem Comm. Corp.	106
8	American Radio Systems	24	Entercom	103
9	Saga Communications	23	Saga Communications	86
10	River City Bcstg.	23	Cox Radio	78

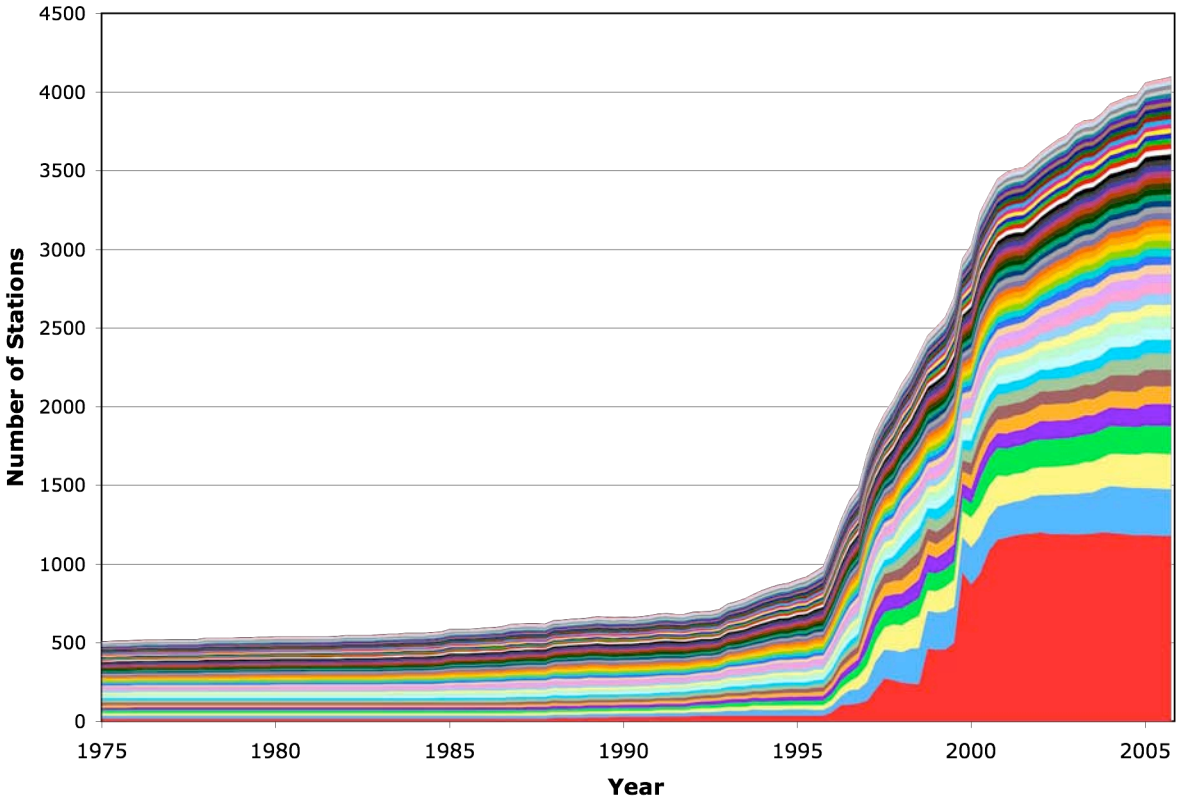
[21] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[22] In November 2006, in conjunction with the announcement of the private equity buyout of Clear Channel, it was reported that Clear Channel would sell off 448 of its stations. The stations to be sold off would be those located outside the top 100 markets. See Angela Moore, "Clear Channel Agrees to $18.7 Billion Buyout," *Marketwatch.com*, Nov. 27, 2006 (corrected version).

Clear Channel also controlled and managed an additional 16 stations through legal devices known as **local marketing agreements**, or **LMAs**. (Two of the stations Clear Channel owns appear to be managed by other companies through LMAs). At its peak, Clear Channel owned 1,205 stations and controlled a few dozen more through LMAs, but has since sold off a small fraction of its radio-station portfolio. The FCC does not prohibit LMAs, though they require radio companies to report them. Thus, even prior to the Telecom Act, the FCC allowed a business practice to undermine somewhat the purpose of the national ownership cap. LMAs became less important when the cap was relaxed and then eliminated. But the practice continues to allow some additional consolidation.

The Fifty Companies with the Largest Number of Stations Over Time

The distribution of stations across these growing radio companies has not been equal. Figure 1-7 shows the total number of stations held by the fifty largest owners over the last three decades.[23]

Figure 1-7. Number of Stations Owned by the Top 50 Owners, 1975-2005.



[23] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

For each year, Figure 1-7 shows the number of stations owned by whichever fifty companies were largest at that particular point in time. Each colored area corresponds to one ranking of owners by size. For example, the red area at the bottom of the graph corresponds to the largest owner at each point in time; the blue area second from the bottom corresponds to the second-largest owner at each point in time; and so on.

Figure 1-7 looks like a rainbow ribbon. Two conclusions from this graph are most important. First, the width of the entire ribbon grows considerably over time. In 1975, the fifty largest radio owners owned a total of 512 stations. That total grew to 589 stations by 1985, and to 984 stations by 1995. In 2005, the number of stations owned by the fifty largest radio owners reached 4,097 stations—a fourfold increase in the last decade.

Second, some of the colored stripes in the ribbon are wider than others, and get wider over time. The ten stripes on the bottom are the widest. The ten largest radio owners totaled 290 stations in 1995, but the 2,504 stations in 2005, representing an almost ninefold increase in the station holdings of the ten largest owners over the past decade. Such intensive consolidation of ownership represents a dramatic change for the radio industry.

Concentration of Commercial Market Shares in Revenue and Listenership

Using data from before the Telecom Act to the present day, this section details how, among commercial stations:

- National concentration of advertising revenue increased from 1993 to 2004, from 12 percent market share for the top four companies to 50 percent market share for the top four.
- National concentration of listeners continued in 2005—the top four firms have 48 percent of the listeners, and the top ten firms have almost two-thirds.
- Both revenue and listenership concentration could increase because of the ABC/Disney–Citadel merger, the Cumulus Media Partners purchase of Susquehanna, and the Clear Channel buyout in 2006.

Unequal Shares of Listeners Among Radio Companies

So far this chapter has discussed concentration in the radio industry as a matter of companies accumulating more radio stations. But not all radio stations are equally valuable, for two reasons. First, different stations acquire different kinds of licenses from the FCC in terms of how and where the FCC will allow the station's antenna to broadcast. Those differences—AM or FM, high or low wattage, tall or short tower, and so on—affect how many listeners a radio station can reach with its broadcast signal. Second, different stations will be more popular among listeners than others. Many factors might determine how many people listen to a station, such as: the type and quality of programming on the station; the station's place in the range of AM or FM frequencies (which corresponds to being on the left, middle, or right of the dial on older-style radios); the history of how many people have been in the habit of

tuning into the station; and the amount of advertising the radio station does or buys for itself, for instance, over the air or on billboards.

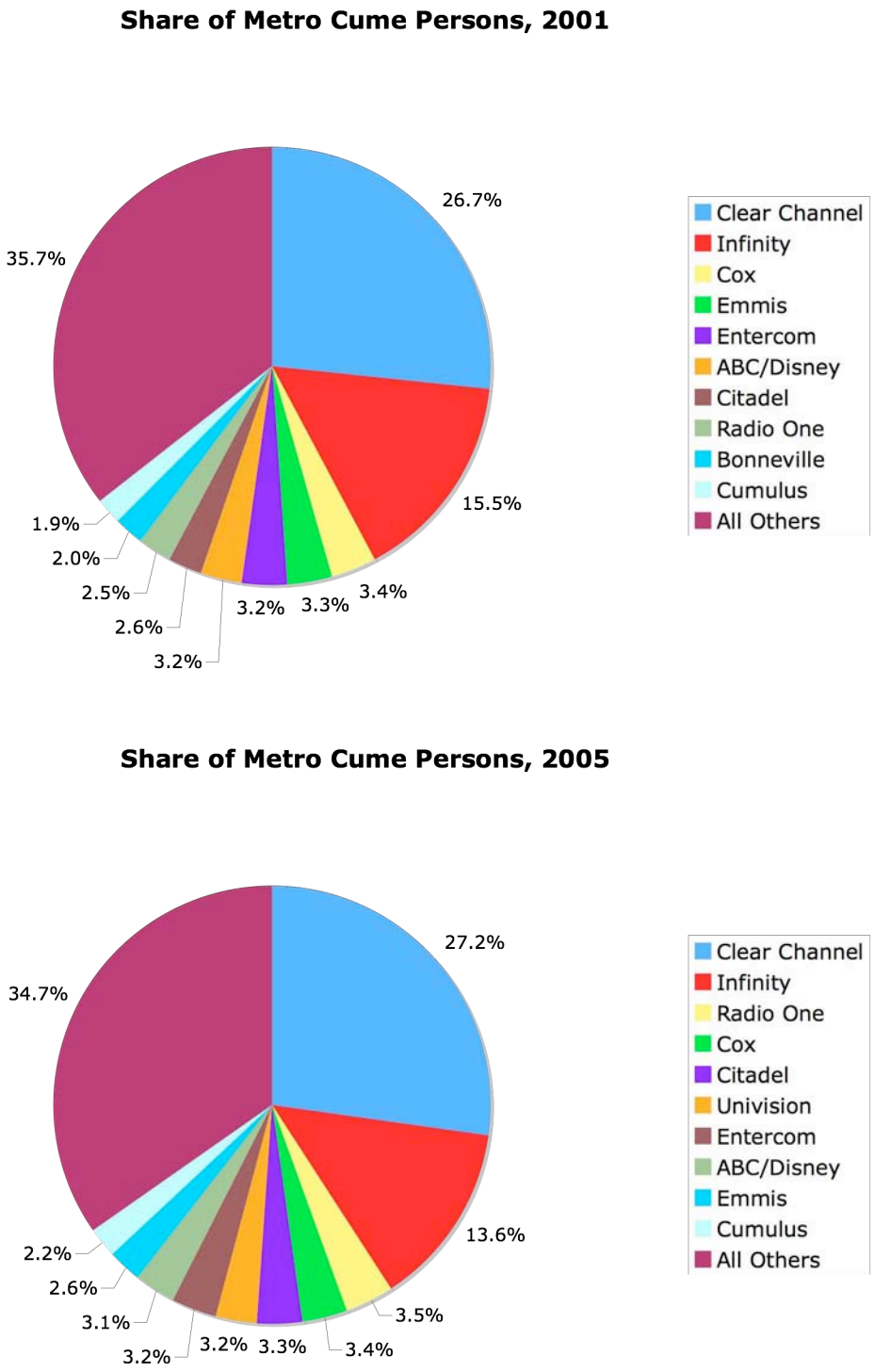
Stations with more listeners will be more attractive to advertisers and thus will get more advertising revenue, all else equal. So measuring listenership and station revenue helps one understand a station's economic and social influence. Stations that reach more listeners might therefore have a larger role in providing entertainment, disseminating news and information, or other cultural activities. Furthermore, radio companies that own stations with more total listeners and greater total advertising revenue will have a larger influence in the radio industry and in society generally.

Figure 1-8 shows the concentration of commercial radio listenership nationwide in 2001 and 2005 as a pie chart.[24] Listenership is measured by the Arbitron Company in a statistic called "metro cume persons," which estimates the number of individual people who listened to a station for at least five minutes within a fifteen-minute period. The national share of listeners for a particular radio company is the sum of the metro cume persons for each station the company owns divided by the total number of metro cume persons for all U.S. stations. In Figure 1-8, the top ten radio companies' shares of listeners are broken out into separate slices of the listenership pie; the figure denotes the remaining thousands of companies and organizations as "all others."

Measuring radio concentration by listener share, as in Figure 1-8, shows even greater concentration than simply measuring by the number of stations owned. Clear Channel's share of nationwide listeners exceeded 27 percent by 2005, having grown slightly since 2001. Infinity, formerly a subsidiary of Viacom and now called CBS Radio, saw its listener share decline from 15.5 percent to 13.6 percent over four years. But many of the other top-ten radio companies saw growth in their listener share over the last four years. Overall, the top ten radio companies had a total market share of 65.3 percent in 2005, up slightly from 64.3 percent in 2001.

[24] Listener ratings data are only available for commercial stations in the BIA Financial Networks database. Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 1-8. National Share of Radio Listeners, Commercial Sector, 2001 and 2005.



Unfortunately, statistics on metro cume persons at regular intervals over a longer historical period are not easily available. But Figure 1-8 does provide suggestive information about the Telecom Act's effect on listener share, since Clear Channel could not have enjoyed 27 percent market share nationwide when it owned just 39 stations back in 1995.

How Concentration of Revenue Share Has Increased Over Time

Fortunately, estimates of annual advertising revenue for each radio station are available on a yearly basis dating from before the Telecom Act.[25] Measures of revenue concentration apply only to the commercial sector; BIA Financial Networks does not estimate station-level revenue for noncommercial entities.

Table 1-4 shows revenue market share statistics for the earliest and latest years currently available, 1993 and 2004.[26] Note that, for the 1993 statistics, "Infinity Broadcasting" and "Infinity Broadcasting Corporation" are listed as separate entities. BIA Financial Networks explains that corporate entities that are either totally distinct or that are related but structured or financed in different ways have been distinguished in their database by keeping or leaving out suffixes like "Corporation," "Company," "Incorporated," and the like.

Table 1-4. Top Ten Commercial Owners by Estimated Revenue of Stations Owned.

Rank	1993 Top Ten Owners	Revenue ($000)	Market Share	2004 Top Ten Owners	Revenue ($000)	Market Share
1	CBS	235,900	3.8%	Clear Channel	3,560,125	26.3%
2	Capital Cities/ABC	226,600	3.7%	Infinity	2,207,500	16.3%
3	Lehman Brothers	160,200	2.6%	Cox Radio	485,600	3.6%
4	Infinity Bcstg. Corp.	113,900	1.8%	Entercom	479,125	3.5%
5	Shamrock Holdings	105,000	1.7%	ABC/Disney	454,700	3.4%
6	Westinghouse Bcstg.	101,400	1.6%	Citadel	406,957	3.0%
7	Clear Channel	99,970	1.6%	Radio One	375,500	2.8%
8	Infinity	97,800	1.6%	Univision	325,275	2.4%
9	Bonneville Int'l	92,400	1.5%	Cumulus	321,275	2.4%
10	Cox Radio	91,150	1.5%	Emmis	311,175	2.3%

One can go beyond Table 1-4 to look instead at how aggregate measures of nationwide consolidation have changed in recent years in the commercial sector. This chapter considers four different measures of concentration over time. Three of the measures are **concentration ratio** measures, or **CR** measures for short. A concentration ratio simply involves adding up the market shares of a certain number of companies. For example, the abbreviation "CR2"

[25] BIA Financial Networks estimates the amount of advertising revenue each station collects each year. Actual accounting records of station revenue are either not reported on a station by station basis by large radio companies or, for small companies, are not required to be reported in public financial statements. Note that radio companies may have revenue from other sources beyond advertising; BIA's measure does not purport to include those other sources.

[26] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

refers to the particular concentration ratio that is the total market share of the two companies with the greatest market share. "CR10" would refer to the total market share of the top ten companies, as mentioned earlier with regard to Figure 1-8.

The other measure of concentration is the sum of the squared market shares of every radio company. Economists and antitrust lawyers call this the **Herfindahl-Hirschman index**, or **HHI**. This measure is useful because it can distinguish between an industry with one dominant company and an industry with a few large companies (but no single dominant company). One might think that the fast-food hamburger industry, with McDonald's, Burger King, and Wendy's, has important differences compared to the computer operating system industry, which Microsoft has long dominated. The concentration ratio measures can miss these differences.

Consider an example with two industries. In the first industry, the very large company might have 99 percent market share while the small company has 1 percent. The HHI for that industry would be the sum of the squared market shares, that is, $(99)^2 + (1)^2$, or 9802. In the second industry, the equally large companies each have 50 percent market share. There, the HHI would be $(50)^2 + (50)^2 = 5000$. The HHI in the first industry is almost twice as large, telling us that the first industry has much greater concentration than the second. Now compare the CR2 measure in both industries. The CR2 would be 100 for both (either 99 + 1 or 50 + 50), obscuring the important difference in concentration. While the CR measures are easier to calculate and understand, the HHI measure provides valuable information about the relative sizes of the largest firms, not just the total market share of the largest firms.

When evaluating mergers, the Justice Department uses a rule of thumb that an industry of an HHI between 1000 and 1800 is concentrated, enough to warrant some concern about any future mergers. (An HHI greater than 1800 is highly concentrated.) Some economic theories predict that, in a concentrated industry, companies can artificially raise prices, stifle would-be competitors, or reduce the quality of their products or services.

In Figure 1-9, the HHI based on the revenue market shares in the radio industry is plotted as a red line against the left-hand axis (ranging from 0 to 1400).[27] The CR2, CR4, and CR10 measures are plotted against the right-hand axis. All four measures start very small and increase rapidly between 1995 and 2000, before declining somewhat from 2001 to 2004.

[27] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 1-9. Four Measures of Revenue Concentration in Radio's Commercial Sector, 1993-2004.

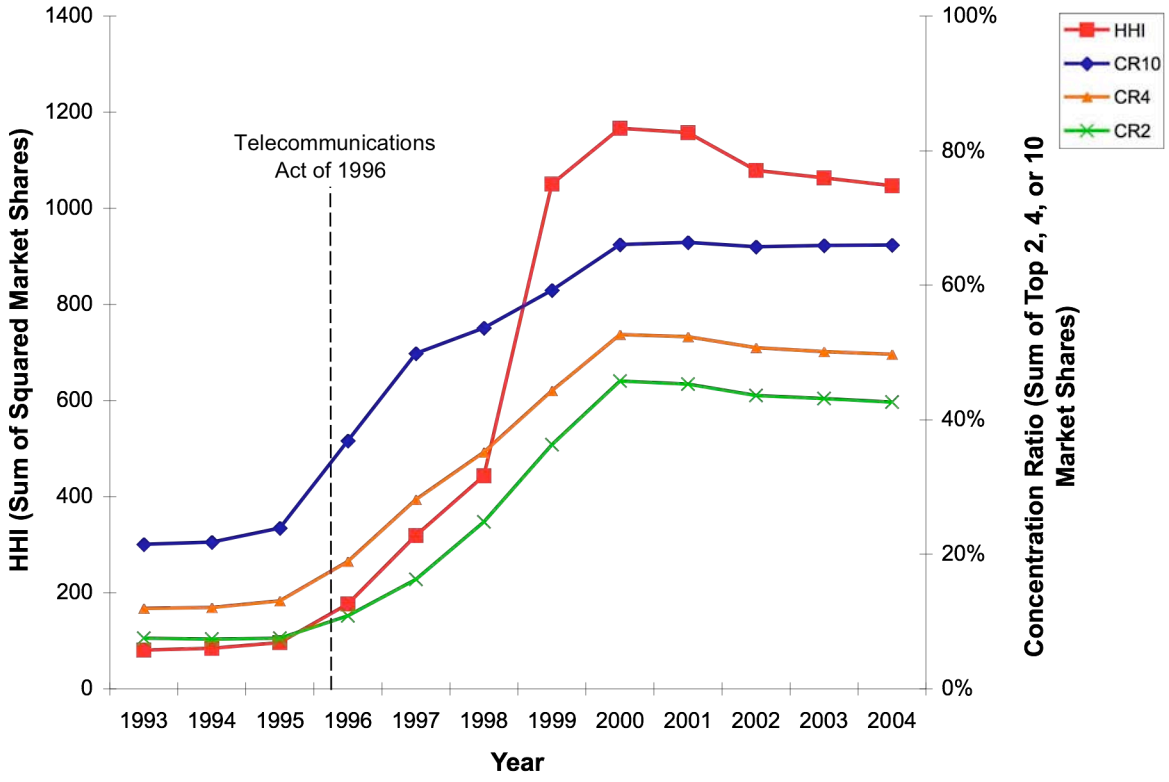


Figure 1-9 shows that nationwide concentration in the radio industry merits concern. In 1993, the HHI for the radio industry was 81. In 2004, the HHI for radio was 1046—down from a peak of 1166 but still within the range of caution according to the Department of Justice's merger guidelines.

More broadly, Figure 1-9 represents what happened when the Telecom Act eliminated the National Radio Ownership Rule. The radio industry changed from an unconcentrated industry to a concentrated industry in a matter of just five years.

The Telecom Act Has Failed Radio on All Fronts

To provide a sense of what has resulted from the increased concentration of ownership, this section shows that:

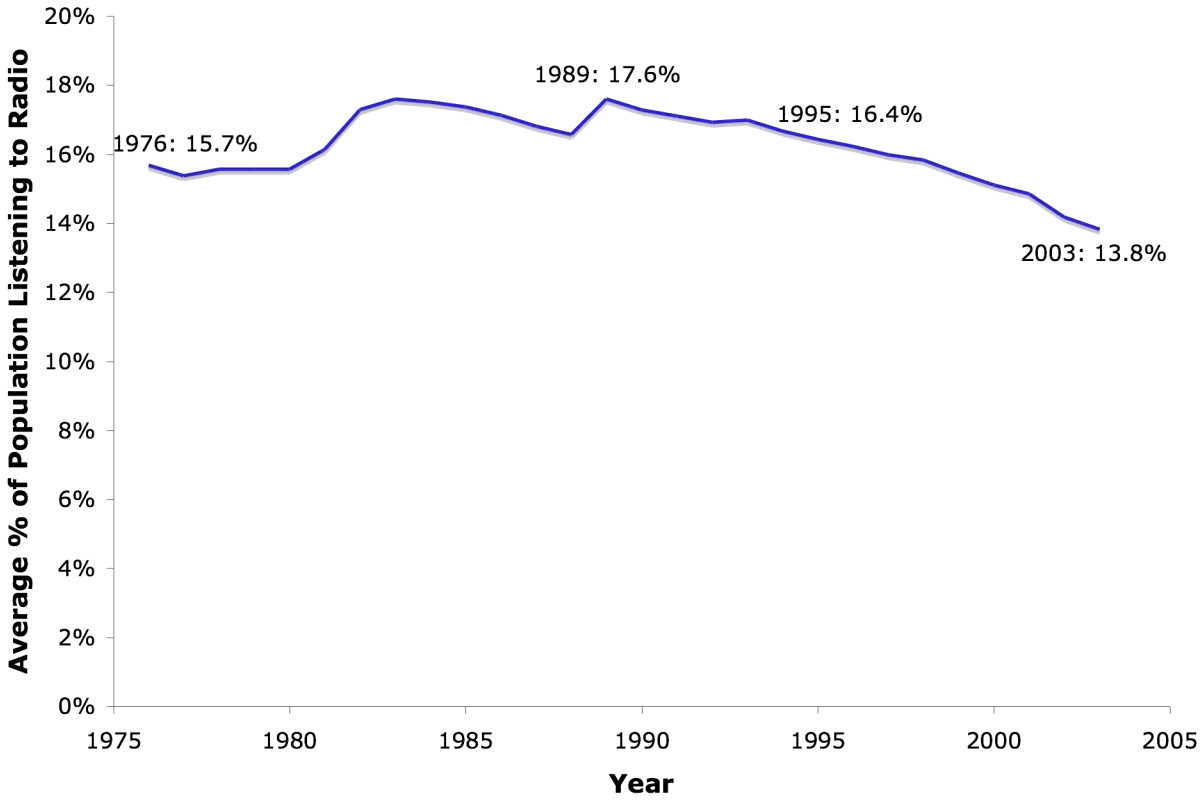
- Across 155 markets, radio listenership has declined over the past fourteen years for which data are available, a 22 percent drop since its peak in 1989.
- Large radio companies are not, in general, more efficient at creating revenue with their ratings, showing that bigger is not necessarily better.

The Long Decline in Radio Listening

An obvious and important measure of radio's popularity is how many people tune in to listen. A radio-industry statistic called the **Average Person Rating**, or **APR**, provides one measure of listenership. It refers to the percentage of the population listening to radio within a market at any particular moment, across both commercial and noncommercial stations. Jim Duncan of Duncan's American Radio has collected APR statistics for 155 markets from 1976 to 2003. Figure 1-10 present the average APR across those 155 markets over that time period.[28]

Figure 1-10 shows that radio listenership, as measured by the average APR across markets, peaked at 17.6 percent in 1989, declining to a historic low of 13.8 percent in 2003 (the last year for which these data are available). This represents a 22 percent decline in APR over fourteen years. From its level of 16.4 percent in 1995, just before the Telecom Act, the average APR across markets declined 16 percent.

Figure 1-10. Radio Listenership as Measured by Average APR (Average Person Rating) Across 155 Markets, 1976-2003.



[28] Source data: James H. Duncan, Jr., *An American Radio Trilogy 1975 to 2004, Volume One: The Markets* (2005).

Most of the decline in listenership has occurred during the time of rapid consolidation of station ownership that this chapter has documented. If greater consolidation served the listening public well, one would expect radio listenership to have increased, to have stopped decreasing, or at the very least to have decreased at a slower pace. But in fact, the decline in radio listenership has accelerated during the post-Telecom Act period of consolidation.

The decline in listenership may have several different causes. But because the decline began back in 1989, and experienced a rapid descent sometime around 1995 to 1998, one cannot point to internet radio, satellite radio, or iPods as the sole cause of declining listenership. Other, older technologies might have had some role, such as CD players in cars, but this is pure speculation. Later chapters will investigate whether consolidation and the programming choices that have come with it have caused the decline in listenership, or at least part of it. But with the data described so far, one can see that the Telecom Act has not stemmed the flow of listeners away from radio.

Recall that proponents of the Telecom Act argued that the law should allow radio companies to take advantage of economies of scale. Bigger radio companies would, they claimed, serve listeners better (for example, through more diverse programming). But Figure 1-10 shows that many listeners have turned away from radio, suggesting that the legislative and regulatory changes failed to make radio a more valuable public resource. So what can we learn about the other argument for the benefits of economies of scale—the idea that bigger radio companies could save costs and operate more efficiently?

The Economies of Scale Never Materialized—and the Stock Prices Have Sagged

Radio companies' financial and accounting statistics are not publicly available in a detailed, station-by-station form. So, to measure radio companies' efficiency, one can instead look at how efficiently they convert their listeners into advertising revenue. The ratio of advertising revenue share to ratings share is known as the **power ratio**. It is calculated by BIA Financial Networks, using ratings shares from Arbitron and their own revenue-share estimates. For example, if a station has a 10 percent ratings share and a 10 percent share of advertising revenue, then its power ratio is 1.0. If another station has a 10 ratings share but has a 12 percent share of advertising revenue, its power ratio is 1.2.

A station with a high power ratio might run its business more efficiently, might attract listeners who are particularly valuable to advertisers, or might have particularly loyal listeners who tune in for a greater amount of time per day. Table 1-5 lists the average power ratios of stations owned by the top ten radio companies (by number of stations owned) in 2001 and 2005.

Table 1-5. Power Ratio of Top Ten Owners, 2001 and 2005.

Rank	2001 Top Ten Owners	Stations Owned	Power Ratio	2005 Top Ten Owners	Stations Owned	Power Ratio
1	Clear Channel	1,198	1.07	Clear Channel	1,184	1.06
2	Cumulus	237	1.04	Cumulus	298	1.04
3	Citadel	178	1.06	Citadel	223	1.08
4	Infinity	176	1.18	Infinity	178	1.20
5	Entercom	98	1.05	Salem Comm.	104	1.00
6	Salem Comm.	82	1.24	Entercom	103	1.05
7	Cox Radio	78	1.11	Saga Comm.	86	1.10
8	Radio One	62	0.72	Cox Radio	78	1.01
9	Regent Comm.	61	1.04	Regent Comm.	74	1.03
10	NextMedia Group	56	0.86	ABC/Disney	72	0.94
---	**INDUSTRY AVG.**	---	**1.05**	**INDUSTRY AVG.**	---	**1.04**

The evidence for the theory that bigger radio companies get a greater share of advertising revenue relative to their share of listeners is mixed. In both 2001 and 2005, five companies within the group of top ten radio companies were at or below the industry average in power ratio. Looking at the two largest radio companies by listenership and revenue, one sees that the average Clear Channel station has a power ratio only slightly above the industry average, while the average Infinity station has a consistently higher-than-average power ratio.

Statistically, the correlation between the average power ratio for a company's stations and the number of stations that company owns lies between 0.006 and 0.008 (on a scale from 0 to 1) depending on the year. This is a weak correlation, certainly too weak to justify the sweeping changes like those the Telecom Act brought to radio. The power ratio measure provides little evidence that bigger radio companies turn listeners into advertising revenue any more efficiently than smaller ones.

This failure of the largest radio companies to deliver greater advertising revenue per listener might explain partially the sagging stock price of companies like Clear Channel, whose share price is at its lowest level in nearly seven years and has exhibited a steady downward trend since its peak in late 2001. The stock prices of Citadel, Cumulus, Emmis, Entercom, and Radio One display similar downward trends over the past two to five years, depending on the company and when its stock went public.

Media Company Break-Ups and What They Mean

On November 16, 2006, private equity firms announced that they will pay $19 billion in cash plus $8 billion in assumption of debt to purchase Clear Channel.[29] According to early reports, the new owners plan to sell off Clear Channel's television stations as well as 448

[29] Angela Moore, "Clear Channel Agrees to $18.7 Billion Buyout," *Marketwatch.com*, Nov. 27, 2006 (corrected version).

radio stations in medium- and small-sized markets.[30] The buy-out comes on the heels of Clear Channel separating its radio/television business from its billboard business and spinning off its concert-venue business in 2005.[31] Providing additional context for questions about the value of media mergers, Viacom also recently split itself into two halves. The new CBS half took over the radio, billboard, and network-television properties and the new Viacom half took over the movie and cable-television properties.[32] Since the split, CBS's chief executive has discussed selling off some of its radio stations.[33]

These developments provide even more evidence that economies of scale in radio did not materialize. Why not? One explanation is that *dis*economies of scale are just as possible as economies of scale in theory and in practice. Large, national companies might have a harder time meeting local listeners' needs, managing their employees effectively, or responding quickly to challenges from competitors. In a recent *New Yorker* article, finance and economics columnist James Surowiecki has pointed out that the top two companies in an industry often waste resources and attention on crushing each other, rather than serving customers or even achieving profitability.[34] He uses the recent technological "arms race" between Microsoft and Sony in the video-game industry to show that having the biggest market share can actually lead to lower profit margins.

Surowiecki's story fits Clear Channel's experience to a tee. Acquiring a massive number of radio stations—including a virtual monopoly in the small Casper, Wyoming market—was part of the bigger-is-better strategy. Clear Channel could offer something its next-largest radio competitor could not: advertising time in almost 200 markets. Advertisers with products to distribute nationally would, in theory, benefit from an offer of one-stop shopping or volume discount pricing. But the extended decline in Clear Channel's stock price shows that this version of the bigger-is-better strategy has not translated into profits.

Another aspect of Clear Channel's bigger-is-better strategy was to acquire holdings in other media beyond radio. With television stations and billboards, Clear Channel could offer advertising time or space on multiple platforms. And with its concert-venue holdings, it planned to cross-promote musicians' concerts, radio appearances, and radio airplay. But these cross-media mergers have not succeeded either, even in business terms. What's worse, such strategies have led to allegations of illegality. In addition to their attempts to take advantage of economies of scale, Clear Channel's strategy has also involved: accepting

[30] Press Release, "Clear Channel Announces Plan to Sell Radio Stations Outside the Top 100 Markets and Entire Television Station Group," November 16, 2006, *available at* http://www.clearchannel.com/Corporate/PressRelease.aspx?PressReleaseID=1825 (last visited December 2, 2006).
[31] Press Release, "Clear Channel Communications Announces Planned Strategic Realignment of Businesses to Enhance Shareholder Value," April 29, 2005, *available at* http://www.clearchannel.com/Corporate/PressRelease.aspx?PressReleaseID=1438 (last visited December 2, 2006).
[32] See, for example, "Sumner Scores Split Decision," *Daily Variety*, June 15, 2005, p. 1.
[33] "CBS, After Viacom Split, Posts Soft Profit Amid Radio Weakness," *Wall Street Journal*, April 27, 2006, p. B2.
[34] James Surowiecki, "In Praise of Third Place," *New Yorker*, December 4, 2006, p. 44.

payments from independent promoters on behalf of record companies seeking airplay for their artists (the new form of payola);[35] using their businesses outside radio to pressure musicians and discriminate against other owners of radio stations;[36] and employing questionable accounting practices.[37]

Radio companies of unprecedented size have, by definition, reduced competition in the true economic sense of having multiple companies competing on a level playing field. They have even failed to generate benefits for investors. In light of this, Congress and the FCC should become skeptical about the need for "regulatory relief" to allow media companies to grow even larger than they already are. Furthermore, now that 448 Clear Channel stations might be on the selling block, the FCC should consider directing that these stations go to small, independent, local, or minority owners. A precedent for such action exists in proposed FCC initiatives to promote minority ownership of media outlets[38] and in the FCC's general power over the licensing process, discussed earlier in this chapter. Thus, the recent media breakups offer a chance for the FCC to take the initiative and play an extremely positive role in enhancing competition, localism, and diversity in radio.

[35] Clear Channel admitted using independent promoters until 2003, when it ceased the practice while denying its illegality. Then, as a result of the New York State Attorney General's investigation of payola, Clear Channel dismissed two employees named in the evidence against the record companies. See Ken Tucker and Katy Bachman, "CC Axes Two After Payola Probe," *Mediaweek.com*, October 12, 2005, *at* http://www.mediaweek.com/mw/news/recent_display.jsp?vnu_content_id=1001304228 (last visited December 2, 2006). The investigation by the New York State Attorney General has expanded from the record companies to the radio companies. Separate settlement talks with the FCC continue. See Brian Ross, "Radio Conglomerates in Talks to Settle Payola Probe," *ABCNews.com*, April 3, 2006, *at* http://abcnews.go.com/Business/story?id=1800141&page=1 (last visited December 2, 2006).

[36] Clear Channel executives have reportedly threatened to deny musicians airplay on their radio stations if the musicians do not perform at Clear Channel venues on tour. The company has also refused to continue distributing content produced by Premiere Networks, which Clear Channel owns, to non-Clear-Channel radio stations. See Eric Boehlert, "Radio's Big Bully," *Salon.com*, April 30, 2001 (last visited December 2, 2006).

[37] Clear Channel's concert business, now spun off and named Live Nation, has been embroiled in a lawsuit with the city of Mountain View, California, for racketeering, fraud, and theft of public funds, among other charges. See Ray Waddel, "Audit Bad News for Clear Channel," *Billboard*, September 28, 2005.

[38] See, for example, Senator John McCain's proposed tax certificate program, Telecommunications Ownership Diversification Act of 2003, S.267, 108th Congress; or former FCC Chairman William Kennard's proposed initiatives, Office of the Chairman, "Studies Indicate Need to Promote Wireless and Broadcast License Ownership by Small, Women- and Minority-Owned Business," December 12, 2000, *at* http://www.fcc.gov/Bureaus/Enforcement/News_Releases/2000/nren0034.html (last visited December 5, 2006). Such initiatives can be designed to comply with the requirements of the Supreme Court's affirmative-action jurisprudence. See Leonard M. Baynes, "Life After Adarand: What Happened to the Diversity Rationale for Affirmative Action in Telecommunications Ownership?," 33 *University of Michigan Journal of Law Reform* 87 (Fall 1999/Winter 2000).

Conclusion

Declining listenership and the questionable financial benefits of bigger radio companies suggest that the Telecom Act has failed both citizens and long-term investors. So who has gained? The main beneficiaries have been managers and executives of incumbent radio companies, speculative short-term investors, and law firms and investment banks that received fees for orchestrating the many mergers and acquisitions (and now the media breakups) following the Telecom Act.

This chapter has shown that by relaxing and then eliminating the National Radio Ownership Rule, the FCC and Congress allowed the radio industry to transform dramatically. What once was an unconcentrated industry of small radio owners has become a concentrated industry nationally. Chapters 2 and 3 explore in more detail how radio consolidation has affected the public, by examining the effect of radio consolidation on local markets and on programming.

Chapter 2
Local Radio Consolidation

Radio is a local medium. One reason for this is simple: radio signals can only travel a certain distance while retaining sufficient strength to be heard. In addition, the FCC limits the strength of radio broadcast antennae to prevent interference among different stations. As a result, most radio stations primarily only reach citizens within a single county or metropolitan area, which helps make radio local.

More importantly, radio is a local medium because the American public and its representatives have decided that localism in broadcasting is a social good. U.S. policy has long promoted the goal that radio broadcasters should use the public-owned airwaves to serve local communities. Localism as an ideal has two basic components: (1) producing some or all programming within the communities in which that programming will be heard and (2) making programming choices according to a local community's particular needs and wants.

Today, the most important regulation for promoting localism is the Local Radio Ownership Rule. With this rule, the FCC limits the number of stations each company, organization, or individual can own within each local market. In theory, caps on local radio-station ownership encourage localism by maintaining competition among local broadcasters and by maintaining a diversity of ownership in each local market. Local competition arguably fosters experimentation and a focus on consumers' desires. Diversity of ownership ideally leads to diversity in programming that includes local tastes and perspectives. In this way, the three broadcast-policy goals Congress directs the FCC to pursue—competition, diversity, and localism—could complement and reinforce each other, if these theories hold true.

Yet achieving the goal of localism may require more than local ownership limits. Recent trends toward nationalization endanger what local programming remains. Admittedly, since the early days of commercial radio, some programming has been syndicated nationally. But most radio programming in the U.S. has traditionally been locally produced, locally chosen, and locally focused.

Congress eliminated the National Radio Ownership Rule in the Telecommunications Act of 1996, as described in Chapter 1. The ensuing nationalization of radio has threatened the industry's tradition of localism. The true significance of recent regulatory changes and the national consolidation those changes have brought about lies in their effects on local radio markets. After all, local radio stations are what people and communities experience.

To document what has happened in local radio over the past decade, this chapter will show:

- **The Largest Local Owners Got Larger:** The number of stations owned by the largest radio entity in the market has increased in every local market since 1992 and has increased considerably since 1996.
- **More Markets with Owners Over the Local Cap:** The FCC's signal-contour market definition allowed companies to exceed local ownership caps in 104 markets.
- **Increasing Local Concentration:** Concentration of ownership in the vast majority of local markets has increased dramatically.
- **How Lower Caps Can Be Justified:** The FCC's local caps—in fact, even lower caps than the current caps—can be justified by analyzing how the caps prevent excessive concentration of market share.
- **Declining Local Ownership:** The Local Ownership Index, created by Future of Music Coalition, shows that the localness of radio ownership has declined from an average of 97.1 to an average of 69.9, a 28 percent drop.
- **Restoration of Local Ownership is Possible:** To restore the Local Ownership Index to even 90 percent of its pre-1996 level, the FCC would have to license dozens of new full power and low-power radio licenses to new local entrants and re-allocate spectrum to new local entrants during the digital audio broadcast transition.

This chapter will first explain what we mean by local markets and local radio. It will then explain the federal policies that apply to local radio ownership. Next, it will document the growth of the largest local owners and the increase in concentration, as well as justify the FCC's local ownership cap. The chapter will introduce the Local Ownership Index that Future of Music Coalition has devised to describe the trend of increasing nationalization and will propose policies to ameliorate the harm to localism that the decline of local ownership implies. Finally, the chapter will discuss the harms associated with increasing concentration in local radio markets and with declining local ownership.

Arbitron Markets as Local Markets

This preliminary section explains that:

- Arbitron markets are the relevant markets in which to assess competition, diversity, and localism.
- For the sake of displaying results in a readable way, it makes sense to categorize Arbitron markets into groups.
- Categorizing Arbitron markets based on population and local commercial share does the best job of grouping similar markets together.

Arbitron Markets

The Arbitron Company, mentioned in Chapter 1, provides ratings of radio stations based on surveys of listeners. Because radio signals have limited reach, Arbitron measures radio stations' listenership on a market by market basis.

Arbitron markets roughly correspond to the metropolitan areas of large, medium, and small cities. They can cover just a single county or parts of multiple counties. Occasionally Arbitron adds, subtracts, or changes a few of the markets it measures, but most markets have stayed the same over recent decades. Currently there are 297 Arbitron markets, not including Puerto Rico.

This chapter treats Arbitron markets as the relevant areas in which to assess competition, diversity, and localism in local radio. One reason to do this is that the radio industry measures itself based on performance, i.e. listener ratings, within Arbitron markets. Moreover, Arbitron markets are areas in which most people are listening to the same set of radio stations. They correspond, better than any other geographic division, to actual communities of listeners.

Over 5,700 stations based in smaller towns and rural areas are not part of any Arbitron market.[1] No statistics on listenership or revenue are available for these non-Arbitron stations, and this chapter will generally not address them.

Arbitron Markets as the Relevant Local Markets

Studying concentration in a market involves analysis that is similar to what the U.S. antitrust authorities—the Department of Justice and the Federal Trade Commission—conduct. In antitrust law, one of the most important questions is which market is relevant to assess the state of competition. For example, should we measure a railroad company's market share as a fraction of just the railroad industry? Or should we also include the trucking industry and the airline-cargo industry as part of a broader domestic shipping industry? Such questions can be contentious. The answers depend on the specific industry and the specific concern about actual or potential harms to competition.

In this chapter, we are implicitly arguing that local radio is the relevant market to analyze. Why local? Because broadcast signals only travel so far at a sufficient strength to be heard. As the introduction to this chapter pointed out, people and communities experience their local radio stations, not every station in the country.

But why analyze local radio alone, and not include other local media in the analysis? Although radio competes to a certain extent with other media like television and newspapers, we think radio has unique characteristics that make it important for its own sake. Radio technology is cheap and ubiquitous. It reaches people at work and in their cars. And it has always been known as an especially "live and local" medium. Not even satellite radio shares all these characteristics.

Radio retains its importance even during the internet age. Even though new internet technologies change the media environment profoundly, they do not appear to substitute for radio so much as supplement it. According to a recent survey by Arbitron and Edison Media

[1] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Research, about three-quarters of respondents who use digital radio, internet radio, or podcasts say that they will continue to listen to traditional radio as much as they do now.[2]

Why We Categorize Arbitron Markets into Groups

We have calculated each statistic in this chapter for each of the 297 Arbitron markets individually. But trying to see 297 separate lines on a single graph or chart and to understand the differences between them would be very difficult, if not impossible. So, for the sake of displaying and discussing our results, we have classified the Arbitron markets into 12 market groups. To do this, we take the numbers for the individual markets and calculate averages within each market group.

Once we chose to sort the Arbitron markets into categories, it was important to choose the categories so that the markets in each were as similar to each other as possible. The market groups we will use classify Arbitron markets based on two dimensions: population size and local commercial share. This categorization—the details of which we will explain in the next subsection—puts similar markets in groups with each other. That way, the tables and figures we report are easy to read and understand, while still allowing us to describe trends in all the Arbitron markets accurately.

Categorizing by Population, and Its Limitations

Arbitron provides rankings of the 297 markets, based on population, with #1 being the market with the largest population. The Arbitron market ranking is one very common and logical criterion used to classify markets. We used such a classification in our 2002 study of the radio industry.

Categories of markets based on population size make sense. Bigger cities tend to have more radio stations, which leads to different dynamics in the industry. Moreover, bigger cities have larger and more diverse economies, with higher costs of living, which can affect radio advertisers, radio listeners, and radio stations.

But categories using population alone would put some markets together that are different in a fundamental way. Many studies of the radio industry gloss over this complexity, but to categorize markets in a rigorous and accurate way, we think the issue deserves attention.

Local Commercial Share

Arbitron considers each radio station to be **home** to exactly one Arbitron market—there's no double counting of stations. Under the current version of the Local Radio Ownership Rule, a station must be home to an Arbitron market to be considered part of that market.

[2] Arbitron & Edison Media Research, "The Infinite Dial: Radio's Digital Platforms," p. 13, *available at* http://www.arbitron.com/downloads/digital_radio_study.pdf (last visited August 27, 2006).

Yet a single station can often reach listeners in markets that are not its home market. This phenomenon of stations bleeding from one market into another occurs, at least to some small extent, in every market. But in some markets, people listen *predominantly* to stations that are home to other, nearby markets. It is these markets, with lots of outside-the-home-market listening, that we wish to categorize separately from others.

The percentage of listening to home-market stations is called **local commercial share,** or LCS**.** By definition, markets with lots of people listening to stations not home to them have relatively low LCS—sometimes as low as 10 or 20 percent LCS. These are markets that are geographically close to a larger market—like San Jose with its close proximity to San Francisco. Or they are markets that overlap with another market—like Nassau-Suffolk (Long Island) with New York City.

Why We Categorize by Both Population and Local Commercial Share

When a market has low LCS, and its listeners tend to listen to stations that are home to some other, nearby market, its radio industry might experience very different economic conditions than other markets with similarly sized populations. We'll illustrate this with an example, using St. Louis and Nassau-Suffolk as high-LCS and low-LCS markets, respectively, with similarly sized populations.

The St. Louis market has 2.6 million people and is home to 69 stations according to Arbitron. Only 3 stations not home to St. Louis garner significant listener ratings there. Contrast this with the Nassau-Suffolk market, which has 2.8 million people and is home to 25 stations. Fully 54 stations not home to Nassau-Suffolk garner significant listenership there. Both markets are in the top twenty markets in population (Arbitron ranks Nassau-Suffolk at #15 and St. Louis at #17). But St. Louis listeners hear radio broadcasts from stations based predominantly in St. Louis, while Nassau-Suffolk listeners hear broadcasts from stations based predominantly in New York City and elsewhere.[3]

What this means is that statistics for the St. Louis market—such as market share, listenership, what programming formats are available—will represent what transpires in St. Louis. But the same statistics for the Nassau-Suffolk market will largely reflect how things have transpired in the New York City market. The dependence of low-LCS markets on their nearby markets makes it important to analyze statistics about them separately. Our classification of Arbitron markets allows us to do so.

Classifying Arbitron Markets into Twelve Groups

As explained earlier, this chapter classifies the 297 Arbitron markets into 12 groups based on both population and local commercial share (or LCS). The twelve resulting groups are described in Table 2-1:

[3] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Table 2-1: Classification of Arbitron Markets

Group	Population Range	LCS Range	Number of Markets
1	4,000,000 +	70% +	12
2	2,000,000 – 4,000,000	55% +	13
3	1,000,000 – 2,000,000	55% +	27
4	600,000 – 1,000,000	55% +	23
5	350,000 – 600,000	45% +	38
6	200,000 – 350,000	70% +	32
7	200,000 – 350,000	45% - 70%	23
8	50,000 – 200,000	70% +	39
9	50,000 – 200,000	45% - 70%	39
10	50,000 – 350,000	0% - 45%	23
11	350,000 – 1,000,000	0% - 45%	23
12	1,000,000 – 4,000,000	0% - 45%	5

Figure 2-1 provides a graphical depiction of how we have classified the Arbitron markets into groups. From top to bottom, the groups go in descending order of population size. From left to right, the groups go in ascending order of LCS.

Figure 2-1. Color Diagram of Arbitron Market Classification.

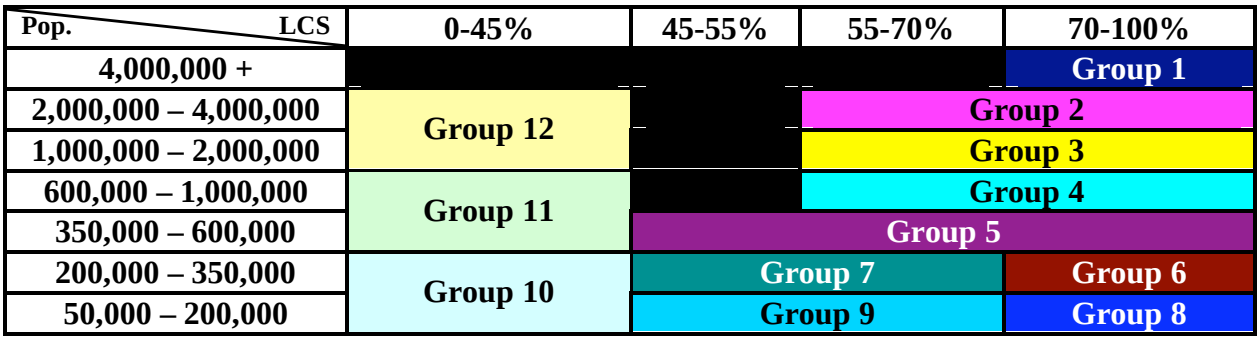


Table 2-1 and Figure 2-1 explain how the twelve market groups we have created vary by population and LCS. Table 2-2, broken into twelve parts, lists the members of each of the twelve groups.[4] (For those interested in statistics on the Arbitron markets reported on an individual basis, the tables in Appendix A to this chapter provide the population and LCS of each Arbitron market.)

[4] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Table 2-2: Membership of Market Groups, Listed in Order of Population Size.

Market Group	Arbitron Markets
#1	New York; Los Angeles; Chicago; San Francisco; Dallas-Ft. Worth; Philadelphia; Houston-Galveston; Washington, DC; Detroit; Boston; Atlanta; Miami-Ft. Lauderdale
#2	Seattle-Tacoma; Phoenix; Minneapolis-St. Paul; San Diego; St. Louis; Baltimore; Tampa-St. Petersburg-Clearwater; Denver-Boulder; Pittsburgh; Portland, OR; Cleveland; Cincinnati; Sacramento
#3	Salt Lake City-Ogden-Provo; Kansas City; San Antonio; Milwaukee-Racine; Columbus, OH; Charlotte-Gastonia-Rock Hill; Providence-Warwick-Pawtucket; Las Vegas; Orlando; Norfolk-Virginia Beach-Newport News; Indianapolis; Austin; Raleigh-Durham; Greensboro-Winston Salem-High Point, NC; Nashville; New Orleans; Memphis; West Palm Beach-Boca Raton; Jacksonville, FL; Hartford-New Britain-Middletown; Buffalo-Niagara Falls; Oklahoma City; Rochester, NY; Louisville; Richmond, VA; Birmingham; McAllen-Brownsville-Harlingen, TX
#4	Dayton; Greenville-Spartanburg, SC; Tucson; Honolulu; Albany-Schenectady-Troy, NY; Tulsa; Fresno; Grand Rapids; Ft. Myers-Naples-Marco Island; Allentown-Bethlehem; Wilkes Barre-Scranton; Albuquerque; Omaha-Council Bluffs; Knoxville; El Paso; Monterey-Salinas-Santa Cruz; Syracuse; Harrisburg-Lebanon-Carlisle; Bakersfield; Baton Rouge; Toledo; Springfield, MA; Little Rock
#5	Greenville-New Bern-Jacksonville, NC; Charleston, SC; Gainesville-Ocala; Des Moines; Columbia, SC; Wichita; Mobile; Colorado Springs; Spokane; Madison; Lafayette, LA; Johnson City-Kingsport-Bristol, TN-VA; Ft. Wayne, IN; Modesto; Lexington-Fayette, KY; Augusta, GA; Boise; Chattanooga; Oxnard-Ventura; Huntsville; Santa Rosa; Youngstown-Warren; Roanoke-Lynchburg; Lansing-East Lansing; Jackson, MS; Flint; Reno; Pensacola; Fayetteville, NC; Saginaw-Bay City-Midland, MI; Shreveport; Corpus Christi; Beaumont-Port Arthur; Appleton-Oshkosh; Biloxi-Gulfport-Pascagoula; Atlantic City-Cape May; Burlington-Plattsburgh; Quad Cities
#6	Tyler-Longview, TX; Fayetteville, AR; Peoria; Springfield, MO; Montgomery; Palm Springs; Salisbury-Ocean City, MD; Macon; Huntington-Ashland, WV-KY; Savannah; Evansville; Utica-Rome; Erie; Anchorage; Myrtle Beach; Portland, ME; Wausau-Stevens Points; South Bend; Ft. Smith, AR; Morgantown-Clarksburg-Fairmont, WV; Binghamton; Wilmington, NC; Lubbock; Columbus, GA; Charleston, WV; Odessa-Midland, TX; Yakima, WA; Amarillo, TX; Travese City-Petoskey, MI; Richland-Kennewick-Pasco, WA; Terre Haute; Duluth-Superior

#7	Eugene-Springfield, OR; Rockford; Flagstaff-Prescott; Poughkeepsie; Asheville, NC; Tallahassee; Hagerstown-Chambersburg-Waynesboro, MD-PA; New London, CT; Lincoln, NE; San Luis Obispo, CA; Kalamazoo; Lebanon-Rutland-White River Junction, NH-VT; Tupelo, MS; Green Bay; Cape Cod; Johnstown, PA; Topeka; Dothan, AL; Waco; Laredo; Chico; Santa Barbara; Muncie-Marion, IN
#8	Florence, SC; Medford-Ashland, OR; Alexandria, LA; Bangor, ME; Lake Charles, LA; Laurel-Hattiesburg, MS; Fargo-Moorhead, ND-MN; La Crosse, WI; Redding, CA; Bend, OR; Marion-Carbondale, IL; Bryan-College Station, TX; Abilene, TX; Panama City, FL; Lima, OH; Eau Claire, WI; Waterloo-Cedar Falls, IA; Parkersburg-Marietta, WV-OH; Wheeling, WV; Monroe, LA; Columbia, MO; Wichita Falls, TX; Billings, MT; Texarkana, TX-AR; Altoona, PA; Grand Junction, CO; Albany, GA; Sioux City, IA; Williamsport, PA; Rapid City, SD; Harrisonburg, VA; Watertown, NY; San Angelo, TX; Bismarck, ND; Grand Forks, ND-MN; Jackson, TN; Great Falls, MT; Meridian, MS; Casper, WY
#9	Santa Maria-Lompoc, CA; Cedar Rapids, IA; Olean, NY; Bowling Green, KY; Sunbury-Selinsgrove-Lewisburg, PA; Elmira-Corning, NY; Champaign, IL; St. Cloud, MN; Ft. Walton Beach, FL; Winchester, VA; Rochester, MN; Charlottesville, VA; Tuscaloosa, AL; Joplin, MO; Dubuque, IA; Pittsburg, KS; Bloomington, IL; Lafayette, IN; LaSalle-Peru, IL; Elizabeth City-Nags Head, NC; Meadville-Franklin, PA; Florence-Muscle Shoals, AL; State College, PA; Columbus-Starkville-West Point, MS; Montpelier-Barre-St. Johnsbury, VT; Valdosta, GA; Elkins-Buckhannon-Weston, WV; Mankato-New Ulm-St. Peter, MN; Lawton, OK; Decatur, IL; Bluefield, WV; Ithaca, NY; Cookeville, TN; Sebring, FL; Jonesboro, AR; Cheyenne, WY; Beckley, WV; Mason City, IA; Brunswick, GA
#10	Ann Arbor; Killeen-Temple, TX; Fredericksburg, VA; New Bedford-Fall River; Concord, NH; Merced, CA; Manchester, NH; Danbury, CT; Rocky Mount-Wilson, NC; Frederick, MD; Clarksville-Hopkinsville, TN-KY; Hilton Head; Muskegon, MI; New River Valley, VA; Santa Fe; Sussex, NJ; Pueblo, CO; Battle Creek, MI; Hamptons-Riverhead, NY; Augusta-Waterville, ME; Sheboygan, WI; Lewiston-Auburb, ME; The Florida Keys
#11	Akron; Wilmington, DE; Sarasota-Bradenton; Stockton; Daytona Beach; Visalia-Tulare-Hanford, CA; Lakeland-Winter Haven, FL; Melbourne-Titusville-Cocoa, FL; York, PA; New Haven; Worcester; Lancaster, PA; Morristown, NJ; Portsmouth-Dover-Rochester, NH; Ft. Pierce-Stuart-Vero Beach, FL; Bridgeport, CT; Ft. Collins-Greeley; Victor Valley, CA; Canton; Reading, PA; Newburgh-Middletown, NY; Trenton; Stamford-Norwalk
#12	Nassau-Suffolk, NY; Riverside-San Bernadino; San Jose; Middlesex-Somerset-Union, NJ; Monmouth-Ocean, NJ

The categorization of the 297 Arbitron markets into 12 market groups makes reporting statistics on local radio more vivid and comprehensible. The highest-population markets with the highest LCS are grouped together, whereas the lowest-population markets with the lowest LCS are grouped together, and so on. This allows comparisons among groups while separating out the effect of markets' population and LCS.

The Local Ownership Cap

This section describes the recent legal environment for local radio:

- The FCC raised the local ownership caps in 1992, from an overall cap of two to an overall cap ranging from two to four.
- Congress raised the local ownership caps again in 1996, moving the overall cap to a sliding scale ranging from one to eight.

Before 1992, the Local Radio Ownership Rule specified that no entity could own more than one FM station and one AM station within a local radio market.[5] In April 1992, the FCC sought to change this rule, allowing each radio company, organization, or individual to acquire stations until they exceed a cap of twenty-five percent local market share.[6] After reconsideration, however, the FCC backed off and enacted less drastic changes.

As of September 1992, the Local Radio Ownership Rule became a sliding scale such that: (1) in markets with fifteen or more stations, an entity could own up to four stations in total, with no more than two AM or two FM stations; (2) in markets with between seven and fourteen stations, an entity could own up to three stations in total, with no more than two AM or two FM stations; and (3) in markets with six or fewer stations, each entity remained limited to no more than one AM and one FM station [because each entity was prohibited from owning 50 percent or more of the stations in a local market].[7]

The Current Caps

Congress, in the Telecommunications Act of 1996, relaxed the Local Radio Ownership Rule even further. The caps Congress specified in that legislation remain in force today. (The details of how those caps are applied, however, have changed, as this chapter will discuss later.) Table 3 describes the local ownership caps and how they vary by the number of stations in each market.[8]

[5] Federal Communications Commission, In re Revision of Radio Rules and Policies, MM Docket No. 91-140, 7 FCC Rcd 2755 ¶ 31 (April 10, 1992).
[6] *Id.* ¶ 12.
[7] Federal Communications Commission, 47 CFR Part 73 Revision of Radio Rules and Policies, MM Docket No. 91-140, FCC 92-361, 57 F.R. 42701 (September 16, 1992).
[8] Local Radio Ownership Rule, 47 C.F.R. § 73.3555 (a)(1) (2005).

Table 2-3: The Local Radio Ownership Rule

In a market with…	Total Limit	AM Limit	FM Limit
45 or more stations	8 stations	5 stations	5 stations
30 to 44 stations	7 stations	4 stations	4 stations
15 to 29 stations	6 stations	4 stations	4 stations
10 to 14 stations	5 stations	3 stations	3 stations
8 or 9 stations	4 stations	3 stations	3 stations
6 or 7 stations	3 stations	3 stations	3 stations
4 or 5 stations	2 stations	2 stations	2 stations
1 to 3 stations	1 station	1 station	1 station

The rule as described in the last four rows is not spelled out explicitly, but is implied by the limitation that no entity can own more than 50 percent of the stations in a local radio market.[9] Note that having *exactly* 50 percent of the stations became permissible in 1996, whereas the 1992 changes specified that each entity must own *less than* 50 percent. Changing "less than" to "exactly" allowed greater ownership consolidation in even the very smallest markets.

Commercial or Noncommercial?

Table 2-3 explains the basics of the local ownership rules. It lays out the numeric caps and how they vary by the number of stations in a market. But Table 2-3 leaves out one important detail—it does not specify whether the stations involved are commercial or noncommercial. But this additional information is necessary for the FCC to determine whether an entity is complying with the Local Radio Ownership Rule. Applying the Rule involves a three-step process:

Step One: The FCC counts the number of commercial *and* noncommercial stations in the local market. The total number of stations determines which caps will apply. In other words, it tells the FCC which row of Table 2-3 to follow.

Step Two: The FCC counts *only* the number of *commercial* stations that each entity owns within the local market. It makes separate counts of the total number of commercial stations, the number of commercial AM stations, and the number of commercial FM stations.

Step Three: Finally, the FCC compares the numbers of stations owned (from Step Two) to the corresponding local caps (from Step One). If, in a particular market, an entity owns too many commercial stations in total, too many AM stations, or too many FM stations, then that entity's holdings in that market violate the Local Ownership Rule.

When determining the total number of stations from 1992 to 2004, the FCC only counted commercial stations in Step One. But in September 2004, the FCC changed this to include both commercial and noncommercial stations. To determine which numerical caps apply to a

[9] *Id.* § 73.3555 (a)(1)(iv).

particular local market, the FCC counts both the commercial and noncommercial stations. This change increased the caps in most markets and allows more ownership consolidation to occur. On the other hand, when the FCC counts the number of stations owned by each entity in Step Two and applies the local ownership caps, it only counts each entity's commercial stations. This has been the case since 1992 and was not changed in 2004.

Thus, the Local Radio Ownership Rule is a limit on the number of *commercial* stations an entity may own—even though the size of a market (determined in Step One) includes both commercial and noncommercial stations. This asymmetry between Step One, which counts commercial and noncommercial stations, and Step Two, which counts only commercial stations, allows more consolidation to occur than a rule that only counted commercial stations in each step.[10]

The FCC's Signal-Contour Market Definition

This section explains that:

- The method by which the FCC defines markets shapes how the local ownership caps will actually be enforced.
- From 1992 until 2004, the FCC's signal-contour market definition allowed more consolidation than Arbitron's market definition would have allowed.
- Because of mergers allowed during the signal-contour market definition era, in 104 markets there is now at least one radio company or organization that exceeds the local ownership cap.

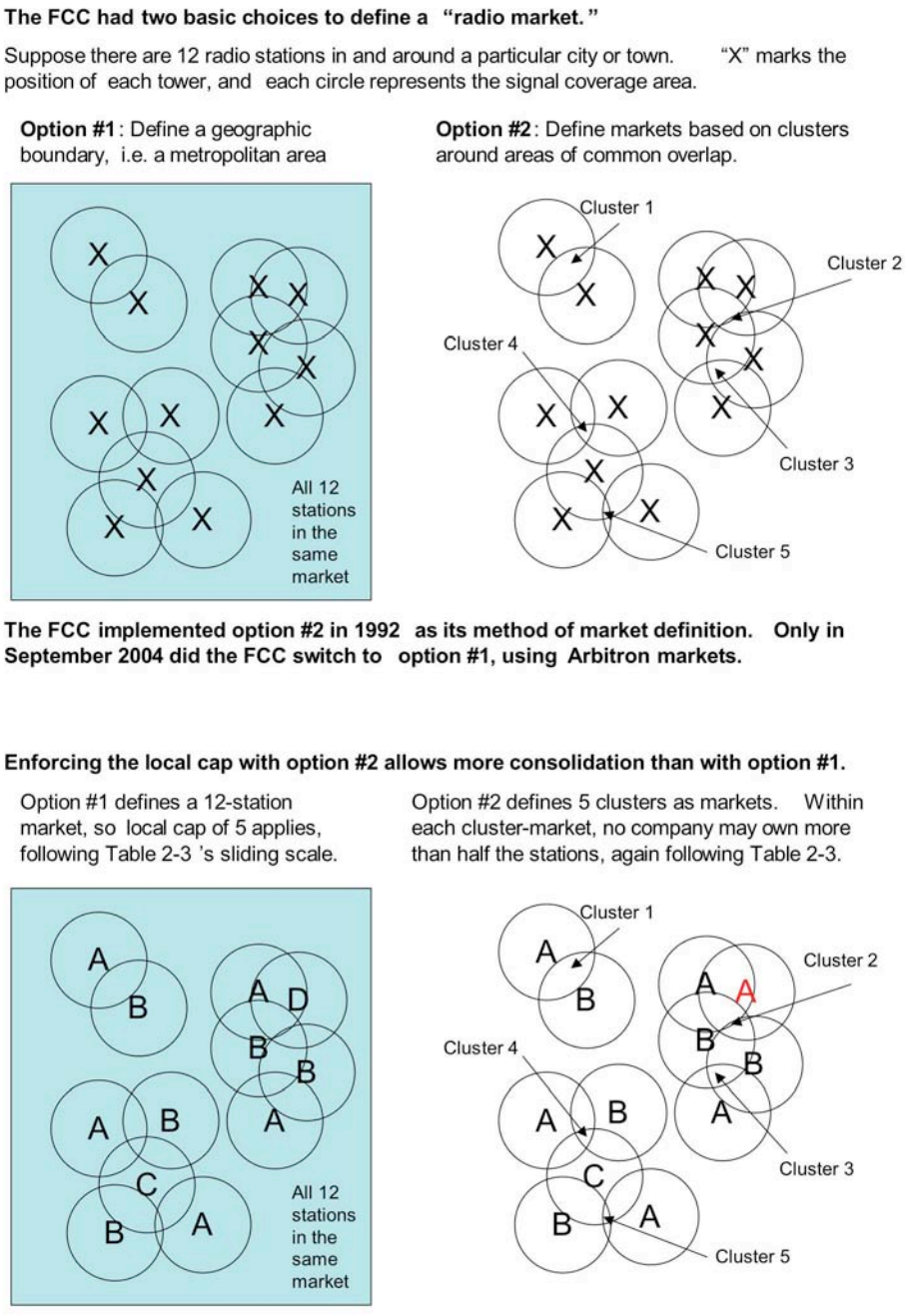
How the FCC applies the Local Radio Ownership Rule (described in Table 2-3 and the explanation in the previous section of the FCC's three-step process to calculate a cap) depends on another important detail: which stations are considered part of a local market and which stations are not. Applying a local cap to a "market" necessitates that the FCC define what a market is and specify what each market includes. The particular way the FCC defines markets determines how the cap on local radio ownership will be enforced.

The FCC's Idiosyncratic Market Definition

So far, this chapter has implied that the FCC uses the same definitions for local markets as the industry and this report—Arbitron markets. And today, the FCC does. But that is a recent development. During most of the radio industry's history, including the lead-up to and aftermath of the Telecommunications Act of 1996, the FCC used a much more complex

[10] Changing Step One to count only commercial stations would reduce the local ownership caps in most markets and thus prevent more consolidation than the current, asymmetrical rule does. But eliminating the asymmetry by changing Step Two to count both commercial and noncommercial stations would not prevent much consolidation. Very few owners of commercial stations also own noncommercial stations, and vice versa. So counting noncommercial and commercial stations against the cap in Step Two would push only a tiny number of radio entities over the caps, if any.

Figure 2-2. The FCC's Signal-Contour Market Definition (as used from 1992-2004).



approach. For many decades until 2004, the FCC used a **signal-contour method** of defining local markets. Signal-contour methods are based on the overlapping signal coverage areas of radio stations. In 1992, the FCC codified a particular implementation of this method, which is described in Figure 2-2.[11]

The signal-contour method worked adequately and did not cause alarm—until the local ownership cap increased, at which point the signal-contour method became something of a loophole. With higher caps, the signal-contour method became more permissive and allowed more consolidation to occur. The two panels of Figure 2-2 explain how, in some markets, a market definition based on signal contours allowed more mergers among radio companies to transpire than would have been permissible otherwise.

In September 2004, the FCC switched to Arbitron's market definition.[12] The Arbitron market definition is more restrictive when used to apply the Local Radio Ownership Rule—if it had been in place since 1992, it would have allowed less ownership consolidation. The change in market definition meant that, suddenly, some radio station owners exceeded the local cap in some markets. But rather than making local owners divest stations held in excess of the local caps, the FCC grandfathered in the excessive holdings.

Grandfathered In—In Excess of the Cap, That Is

The issue of market definition explains why radio companies in some markets appear to have radio-station holdings in violation of the local ownership cap. For example, when a company owns nine stations in a market with a cap of seven stations, the signal-contour market definition can often explain the apparent violation.

Because of the FCC's previous use of signal-contour market definition, some owners now exceed the local ownership cap and were grandfathered in when the market definition changed in 2004. Table 2-4 shows how many markets and how many owners are in such a situation.[13]

In 104 markets, or over one-third of all Arbitron markets, a radio company exceeds some aspect of the local ownership cap, whether it is the overall cap, the FM cap, or the AM cap. Appendix B to this chapter lists the individual Arbitron markets in which at least one entity exceeds the cap.

[11] For a helpful overview and explanation, see Notice of Proposed Rulemaking: Broadcast Services; Radio Stations, Television Stations, 65 Fed. Reg. 82305 ¶¶ 2-4 (Dec. 28, 2000).
[12] Notice of Public Information Collection(s) Being Reviewed by the Federal Communications Commission, Comments Requested, 69 Fed. Reg. 78022 (Dec. 29, 2004).
[13] Source data for ownership holdings and market sizes: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Table 2-4. Holdings in Excess of the Local Ownership Cap, by Market Group.

Market Group	Number of Markets in Group	Markets with Owner(s) Exceeding Overall Cap (# of Owners in Excess)	Markets with Owner(s) Exceeding FM Cap (# of Owners in Excess)	Markets with Owner(s) Exceeding AM Cap (# of Owners in Excess)	Markets with Owner(s) in Excess of at least One Aspect of the Cap (Overall, FM, or AM)	Percent of Markets in Excess
1	12	2 (2)	3 (3)	1 (1)	3	25%
2	13	0 (0)	3 (3)	0 (0)	3	23%
3	27	5 (5)	9 (13)	1 (1)	11	41%
4	23	8 (8)	13 (18)	1 (1)	14	61%
5	38	6 (6)	16 (19)	0 (0)	16	42%
6	32	11 (13)	14 (22)	0 (0)	17	53%
7	23	3 (4)	5 (6)	0 (0)	6	26%
8	39	7 (8)	12 (13)	0 (0)	13	33%
9	39	7 (7)	9 (9)	0 (0)	11	28%
10	23	4 (4)	6 (6)	0 (0)	7	30%
11	23	3 (3)	2 (2)	0 (0)	3	13%
12	5	0 (0)	0 (0)	0 (0)	0	0%
TOTAL	**297**	**56 (60)**	**92 (114)**	**3 (3)**	**104**	**35%**

Exceeding the Caps Means Greater Concentration

Using the signal-contour market definition resulted in even higher levels of concentration than raising the local caps using Arbitron's market definition would have allowed. The concentration of ownership, as measured by the Herfindahl-Hirschman Index (HHI), is greater in markets with at least one entity in excess of the cap. We introduced the HHI in Chapter 1 as a tool antitrust authorities use to assess concentration. It is simply the sum of the squared market shares of each company in a market.

Markets with at least one owner in excess of some aspect of the local ownership cap have an average listenership-ratings HHI of 2868, compared to an average of 2465 for markets without. HHIs based on stations' advertising revenue show a similar difference: 3741 for markets with an owner in excess of the cap, 3431 for markets without.[14]

Thus, markets with cap-exceeding owners have HHIs that are 403 points greater (using shares of listenership ratings) and 310 points greater (using shares of advertising revenue). This shows how important regulatory details like market definition can become.

[14] Source data for the HHI calculations (Arbitron ratings and revenue estimates): Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

The Devil Is in the Details

Holdings acquired under the old signal-contour market definition have been grandfathered in. Thus, situations in which some entity exceeds the cap are not necessarily illegal. Such situations illustrate, however, that regulatory details can matter quite a bit. And this highlights another problem with the signal-contour market definition, beyond the way it exacerbated increasing consolidation.

One reason we've waited until the third section of this chapter to explain the issue of market definition is the issue's complexity. The signal-contour method market definition, in particular, is almost hopelessly complicated to analyze, let alone explain. Signal-contour-defined markets exist only in the most intangible way. For example, a station in Waterbury, Connecticut could be in hundreds of different markets, depending on how many stations' signals its own signal overlaps. Arbitron's method of market definition—assigning each station a home in exactly one market—is much more practical and intuitive.

Thinking of markets in terms of the convoluted and multiplicative signal-contour market definition is like staring at the radio industry through the looking glass. Moreover, such a lack of clarity makes it difficult for the public to monitor the industry—or the FCC itself, for that matter. It was such a big problem, in fact, that the FCC actually had to solve it by switching to the Arbitron definition in September 2004. We can be thankful that the FCC saw fit to fix the problem, but we still have to deal with the results from the many years that they used the opaque signal-contour market definition.

The Largest Owner(s) in Each Local Market Over Time

In this section, we consider how big, in terms of the number of stations owned, the largest owner in each local market has become:

- The average number of stations owned by the largest owner in each market has increased, from a maximum of two in most markets to a maximum of eleven.
- This is a result of the increased local ownership cap as well as the signal-contour market definition.

The most basic and direct way to measure the effect of the FCC (in 1992) and Congress (in 1996) having raised the local ownership cap is to count how many stations the largest radio company in each local market owns.

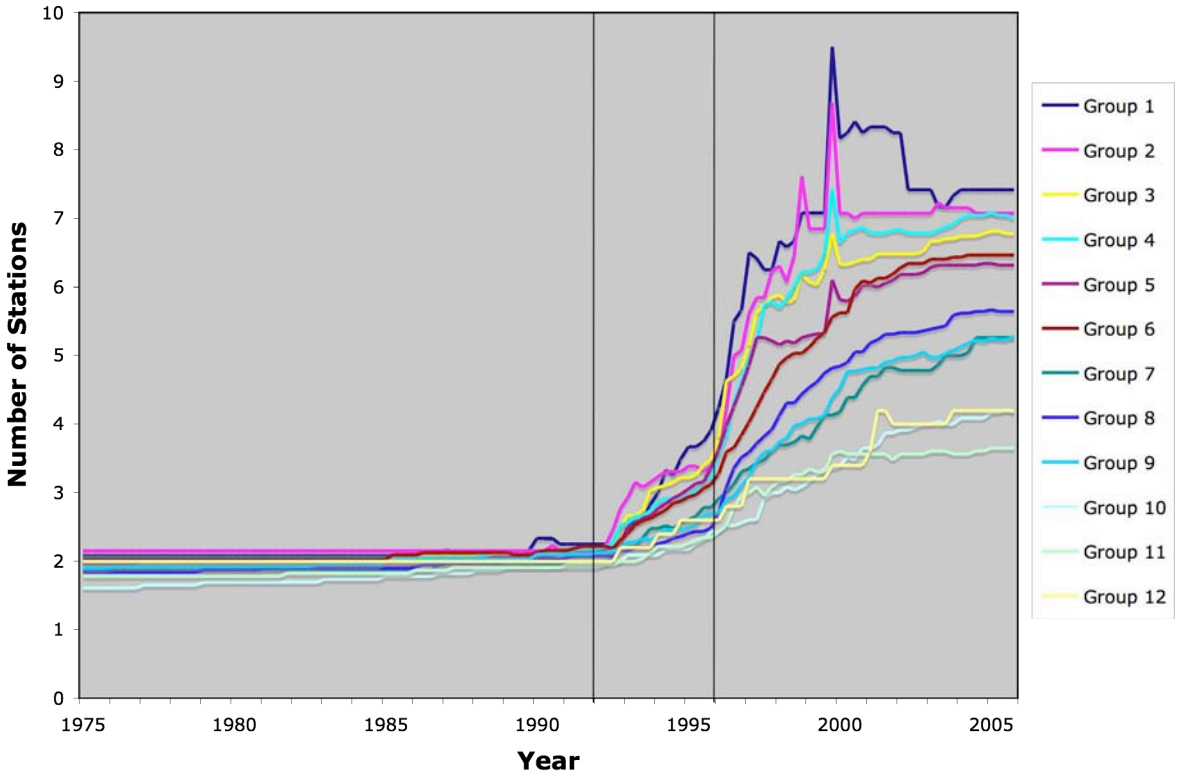
Until 1992, the Local Radio Ownership Rule stated that no entity could control more than one AM and one FM station in each market—so the largest owner in each market was constrained to two stations in total.[15] Between 1992 and 1996, radio companies in all but the

[15] The ownership-history database we have constructed from BIA Financial Networks data shows that, in several markets, some entity exceeds the supposed limit of two. This could be a result of

smallest markets were constrained to owning three or four stations in total. Statistics on the number of stations owned by the largest owner in each market should reflect this change. They should also demonstrate the effect of the local-cap increase contained in the Telecommunications Act of 1996.

Figure 2-3 displays an average, for each market group, of the number of stations owned within an Arbitron market by the largest owner in that market.[16] Vertical lines denote the 1992 increase in the caps and the 1996 further increase in the caps. We have calculated the number of stations owned by the largest owner in each individual market. But we present market-group averages because, as we explained in the first section of this chapter, it would be impossible to distinguish 297 separate lines packed into a single graph.

Figure 2-3. Number of Stations Owned in a Market by the Largest Owner in a Market, 1975-2005, Average by Market Group.



In Figure 2-3, we see the pattern one would expect. From 1975 to 1992, the largest companies in all markets owned only two stations. Between 1992 and 1996, the largest companies grew to an average size of between two and four stations. After 1996, the statistics differ more by market group.

inaccurate or incomplete data on mergers and acquisitions. It could also simply result from the fact that the FCC's signal-contour markets do not correspond to Arbitron markets.

[16] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

For market groups 1 through 9, those with relatively high local commercial share (LCS), the largest owners have, on average, between five and eight stations. These numbers correspond, roughly, to the limits under the current local ownership rule. The rule currently caps ownership on a sliding scale from five to eight, depending on the number of stations in each market, for markets with at least 10 stations.

In market groups 10 through 12, those with relatively low LCS, the largest owner in each market tended to have between three and four stations during the period from 1996 through 2005. Low-LCS markets tend to have relatively fewer stations that are home to them. Not only does this smaller number of stations allow fewer opportunities for mergers, but it also brings tougher constraints under the local ownership cap (see Table 2-3 above).

Comparison to the Local Ownership Caps

The number of stations held by the largest owner in each market correlates imperfectly with the local ownership cap in those markets. The correlation is imperfect partly because of the complexities of how to define markets described earlier (i.e., the old signal-contour method versus the current Arbitron-based method).

Table 2-5. Current Local Ownership Caps versus Current Largest Owners' Holdings, by Market Group.

Market Group	Average Number of Stations in Market (Com/Noncom)	Average Number of Stations Owned by Each Owner	Average Number of Stations Owned by Largest Owner	Average Overall Local Ownership Cap	Difference (Largest Owner's Stations minus Cap)
1	76 (57/19)	2.3	7.4	8.0	-0.6
2	52 (41/11)	2.2	7.1	7.8	-0.7
3	43 (35/8)	2.2	6.8	7.3	-0.5
4	37 (30/7)	2.6	7.0	7.0	-0.0
5	30 (25/5)	2.5	6.3	6.6	-0.3
6	27 (22/5)	2.9	6.5	6.3	+0.2
7	21 (17/4)	2.5	5.3	6.0	-0.7
8	19 (15/4)	2.9	5.6	5.9	-0.3
9	16 (13/3)	2.6	5.3	5.6	-0.3
10	13 (10/3)	2.1	4.2	4.7	-0.5
11	15 (11/4)	1.8	3.7	5.3	-1.6
12	22 (15/7)	1.9	4.2	5.8	-1.6
ALL	**28 (22/6)**	**2.5**	**5.8**	**6.2**	**-0.4**

Table 2-5 shows how the number of stations owned by the largest owner compares to the number of stations in each market, the number of stations owned by the average owner (as opposed to the largest owner), and the local ownership cap.[17] Even on average, the largest owners in the markets categorized as market group 6 exceed the local ownership cap.

This section has shown that the largest owner in each market now has more stations than the largest owner did before the Telecommunications Act of 1996. This is the most direct and straightforward result of raising the local ownership cap. The largest owners in each local market became much larger. Less straightforward, but also important to remember, is that some markets experienced even greater consolidation because of the FCC's old signal-contour market definition, as the previous section explained.

Local Concentration

This section discusses measures of economic concentration within local markets:

- Concentration of ownership in the vast majority of local markets, as measured by the Herfindahl-Hirschman Index (HHI), has increased dramatically, often well beyond levels that the Department of Justice would consider to be cause for concern.
- Local HHIs based on listenership ratings now range from 1396 to 3634 across the twelve market groups, where figures greater than 1800 are considered a "danger zone" for excessive concentration.
- Local HHIs based on advertising revenue shares now range from 1646 to 5533 across market groups, with most exceeding the threshold of 1800.

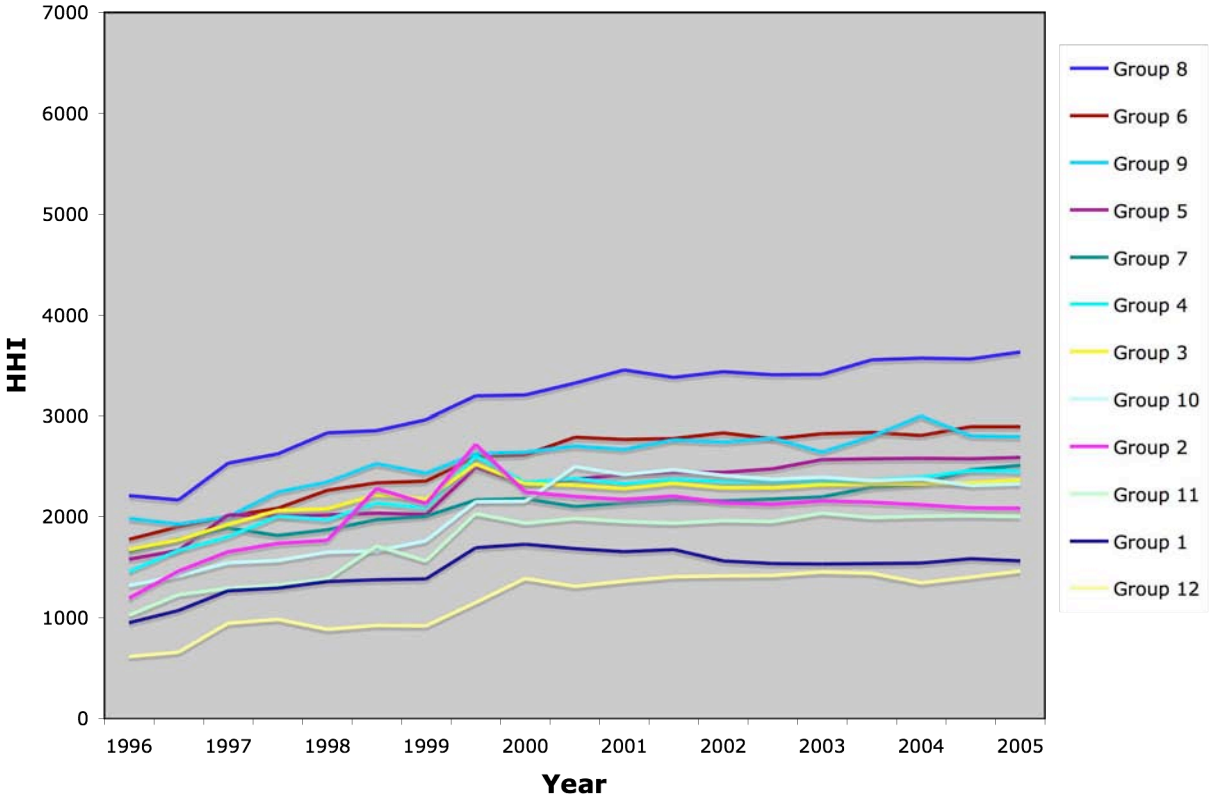
Concentration of local market shares is probably an even better measure of the concentration of economic and social power than the number of stations owned by the largest owner in each market. The Herfindahl-Hirschman Index (HHI), or the sum of squared market shares, provides a specific measure of concentration.

If harms to consumers from reduced competition are the fire, then antitrust authorities use HHI as one way to measure how thick the smoke is. Under the Department of Justice's and Federal Trade Commission's merger guidelines, an HHI of 1000 or more presents some cause for concern about future mergers, while an HHI of 1800 presents an even greater cause for concern. When the flames of anti-competitive practices are severe enough, an HHI of 1800 or more sets off the alarms. High HHI numbers represent a danger zone for excessive concentration.

[17] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 2-4 shows HHIs based on local Arbitron listenership ratings over the last ten years, broken down by market group.[18] In Spring 1996, average HHIs in the market groups ranged from 616 (Group 12) to 2214 (Group 8). By Spring 2005, the average HHIs ranged from 1396 (Group 12) to 3634 (Group 8). The listenership ratings HHIs in each market group demonstrate a steady increase in concentration within local markets over the past decade.

Figure 2-4. Herfindahl-Hirschman Index (HHI) for Local Market Concentration of Listenership Ratings, 1996-2005, Average by Market Group.



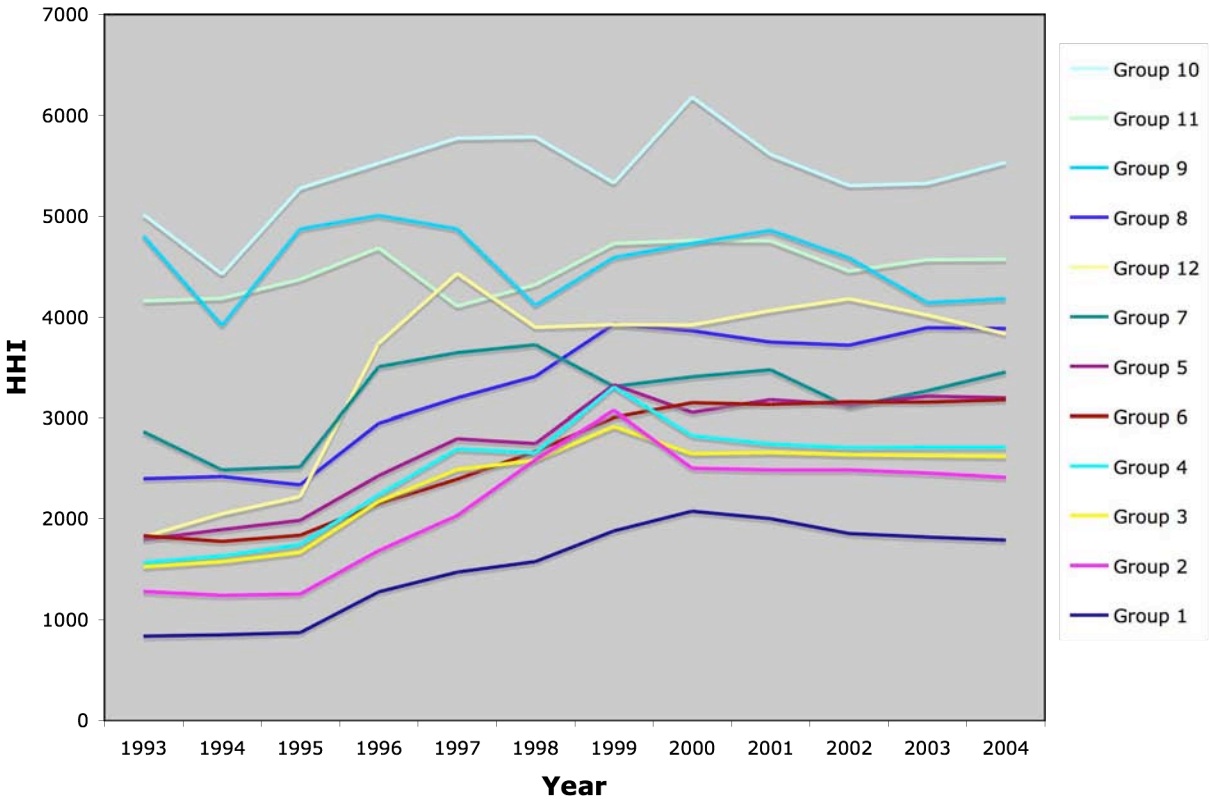
Most local markets' ratings-based HHIs were already high to begin with. The merger guidelines of the Federal Trade Commission (FTC) and the Department of Justice (DOJ) view HHIs between 1000 and 1800 as somewhat troublesome and HHIs above 1800 as very troublesome.[19] Out of 297 Arbitron markets, 232 had HHIs greater than 1800 in Spring 2005. Sixty-three more had HHIs between 1000 and 1800. (For the other two markets, no HHI measure was available.) In sum, the majority of local radio markets have levels of concentration that ordinarily give rise to antitrust concerns about excessive market power.

[18] Source data for the HHI calculations based on Arbitron ratings: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[19] Federal Trade Commission and Department of Justice, Commentary on the Horizontal Merger Guidelines (March 2006), p. 20.

Local HHIs Based on Revenue

An alternative measure of concentration is to calculate HHIs based on market shares of advertising revenue. Figure 2-5 displays these HHIs over a slightly different time period, 1993 to 2004.[20] This time frame has the advantage of providing data from before the Telecom Act.

Figure 2-5. Herfindahl-Hirschman Index (HHI) for Local Market Concentration of Station Revenue, 1993-2004, Average by Market Group.



The HHIs based on revenue and shown in Figure 2-5 are much higher and more volatile. They also demonstrate an upward trend, moving from a range of 840 (Group 1) to 5017 (Group 10) in 1993 to a range of 1646 (Group 12) to 5533 (Group 10) in 2004.

Not surprisingly, local radio fares even worse under the FTC/DOJ merger guidelines using revenue-based HHIs than using ratings-based HHIs. Of the 297 Arbitron markets, 281 had a revenue-based HHI greater than 1800 in 2004. Another 14 markets—mostly very large markets from market group 1—had HHIs between 1000 and 1800. (Once again, HHIs for two markets were not available.)

[20] Source data for the HHI calculations based on BIA station-level revenue estimates: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Appendices C and D reports the HHIs, as well as the two- and four-firm concentration ratios (the summed market shares of either two or four firms), for each Arbitron market, using ratings-based (Appendix C) and revenue-based concentration measures (Appendix D).

Concentration Well Beyond the Danger Zone

The Department of Justice and the Federal Trade Commission use HHI statistics as a " 'starting point' for analysis," according to the 2006 revisions to their merger guidelines.[21] Even previous to the recent revisions, it was clear that the last decade's radio mergers were highly questionable. Whether the Department of Justice and Federal Trade Commission are moving away from the HHI measure, which has been in usage since the 1980s, is a separate issue.

Besides, even the recent revisions would suggest the need for concern about competition in local radio markets. In the revised guidelines, high HHIs do not necessarily lead to antitrust action, just as low HHIs do not necessarily lead to inaction by the antitrust authorities. But the HHIs in local radio are well beyond the ranges contemplated in the merger guidelines. For most local radio markets, concentration has gone well past the threshold of 1800 HHI into the danger zone of 3000, 4000, 5000, and even greater HHIs. The mergers that Congress has allowed in radio have greatly reduced competition, and should certainly have been scrutinized more fully, based on any version of the merger guidelines.

The substantially and increasingly high HHIs of local radio markets cast doubt on the wisdom of raising the caps in 1996. The potential harms to the public from such high concentration include reduced programming quality, reduced diversity of programming, or higher prices for consumer goods (an indirect effect of higher radio-advertising prices).

But the harms from concentration are not limited to such indirect effects on programming and prices. Consolidated control of the radio industry may also have facilitated the recent scandal over payola-like practices. Having fewer players in an industry may have made it easier to develop and enforce the rules of illicit schemes to funnel pay-for-play money from record labels through independent promoters to radio companies.

Justifying the Local Ownership Cap—Or an Even Lower Cap

This section provides two methods of justification for a numeric local ownership cap. Both of these are algorithms for calculating a numeric cap to prevent HHIs above 1800:

- Method #1 for justifying the numeric caps implies that the overall local ownership cap should sit between two and five in all but the largest markets, population-wise (that is, in all market groups except 1, 2, and 12).

[21] Federal Trade Commission and Department of Justice, Commentary on the Horizontal Merger Guidelines (March 2006), p. 20.

- Method #2 for justifying the numeric caps implies that the overall local ownership cap should sit between two and four in all but the most populated markets.
- Even the largest markets—the thirty markets in market groups 1, 2, and 12—require caps between five and eight, which correspond to the current caps in some of those markets and even lower caps in others.

Some radio companies and some regulators have challenged and will continue to challenge the logic of the local ownership cap in court. But the analysis of the previous section shows that raising the local ownership cap has caused a sharp increase in both ratings and revenue concentration within local markets. Such an increase creates conditions in which radio might serve the public less satisfactorily by reducing choice of programming offerings, reducing quality of programming, or indirectly inflating prices for goods or services whose sellers advertise on radio. Based on the concerns associated with high HHIs, and the recent, large increases in local radio HHIs, one might conclude that lower caps would be preferable to higher caps.

Method #1: Preventing Concentration Resulting from One Large Owner

To maintain the current local ownership caps in the face of court challenges, or to implement lower caps, the FCC must provide a justification. This section provides a pair of justification methods that connect numeric caps (i.e., one entity may not own more than X stations in a market) to measures of concentration. The first method, described in this sub-section, involves determining what local cap is necessary to prevent one large owner from obtaining overly concentrated control.

First, we take the current distribution of ratings among stations in each local market as given. Accepting this distribution as given just means accepting the idea that some stations will always be more popular than others, perhaps because they have higher-wattage antennae or particularly loyal audiences. (The alternative would be to treat all stations as equal, which has ridiculous implications like treating the 50,000-watt WABC station in New York City as equivalent to the 1,250-watt WFMU in East Orange, New Jersey.)

Next, we suppose that each station in each market had a distinct owner. Then, in each market, we imagine a hypothetical radio company. This company buys the highest-rated station, then the next-higher-rated station, and so on. What local ownership cap is necessary to keep the local HHI below the danger zone of 1800 and above?

For example, consider a hypothetical market with 31 stations in which one station gets 10 percent of the ratings, fifteen stations get 5 percent each, and fifteen stations get 1 percent each. The hypothetical largest owner buys the 10 percent station first. All the other stations are independently owned. With a cap of one, the HHI would be 490 [or $10^2 + 15(5^2) + 15(1^2)$].

With a cap of two, the hypothetical largest owner can buy another station, one of the 5-percent-rated stations. Now the HHI becomes 590 [or $15^2 + 14(5^2) + 15(1^2)$]. With a cap of three, the HHI becomes 740 [or $20^2 + 13(5^2) + 15(1^2)$].

This process continues until the cap hits seven, when the hypothetical largest owner has 40 percent market share (it would own the 10-percent-rated station and six five-percent-rated stations). At that point, the HHI reaches 1840 [or $40^2 + 9(5^2) + 15(1^2)$]. So a cap of seven would be too high to keep this local market's HHI below 1800. This implies that a cap of six is needed.

The advantage of method #1 is its conservatism in one respect. Except for the holdings of the hypothetical largest owner, this method assumes that every other station is independently owned. In reality, a second owner might consolidate ownership among those stations, increasing the local HHI. On the other hand, this method assumes that a large owner can cherry-pick the highest-rated stations. In this sense, the method of justifying the local ownership cap provides a prophylactic rule against a worst-case scenario.

Table 2-6 shows the results of such an inquiry, and the local ownership cap that is implied by that procedure.[22]

Table 2-6. Justifying a Numeric Local Ownership Cap, Method #1.

Market Group	Average Implied Local Ownership Cap Based on Method #1	Average Actual Local Ownership Cap	Difference (Implied – Actual)
1	6.7	8.0	-1.3
2	5.2	7.8	-2.4
3	4.2	7.3	-3.1
4	3.9	7.0	-3.1
5	3.5	6.6	-3.1
6	2.8	6.3	-3.5
7	3.1	6.0	-2.9
8	1.9	5.9	-4.0
9	2.6	5.6	-3.0
10	3.3	4.7	-1.4
11	4.3	5.3	-1.0
12	7.6	5.8	+1.8

In market groups 1 through 11, the average implied ownership cap is lower than the average actual ownership cap. In some market groups, the average implied cap is as many as 3 or 4 stations lower.

Only in the odd market group 12—which contains only five Arbitron markets—is the implied cap higher than the actual cap. In these markets, LCS is very low, meaning that most of their listeners tune in to stations that are not home to that market. This means that ownership of the home-market stations provides less leverage in increasing or reducing HHI.

[22] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

This explains why market group 12 is an anomaly. The bottom line for the other 292 Arbitron markets is that the current local ownership caps are too high to maintain an HHI of 1800.

Table 2-6 shows that, using method #1 which takes the current distribution of listener ratings among stations as given, *lower* local ownership caps are justified to ensure that local HHIs stay below 1800.

Method #2: Divesting the Lowest-Rated Stations to Reduce the Local HHI

Our second approach to justifying a numeric local ownership cap involves something of the opposite procedure: asking how many fewer stations the largest local radio entities would have to own in order to bring HHIs back out of the danger zone. Method #2 is based on the idea of keeping market concentration below the danger zone marked by an HHI of 1800.

For this method, we start by taking both the current distribution of stations' ratings *and* the current ownership of stations as given. From there, we calculate what each market's HHI would be if successively lower ownership caps were enforced, until the HHI is below 1800.

For example, consider a hypothetical market in which one owner has six stations, one owner has five stations, and one owner has four stations. Suppose the HHI currently exceeds 1800. We would first calculate the HHI under a local ownership cap of five stations. Thus, we imagine that the owner with six stations has to divest one station to an independent owner. The HHI would be recalculated. If the HHI no longer exceeds 1800, then we stop, considering the *implied cap* (the necessary cap to reduce the HHI below the danger zone of 1800 and above) to be five.

If the HHI still exceeded 1800, we do the process again with the hypothetical cap reduced by one, from five to four. Under a cap of four, the owner that originally had six stations would be imagined to divest two stations now, each to independent owners. In addition, the owner that originally had five stations would now have to divest one station, to yet another independent owner. We would recalculate the HHI. If it fell below 1800, then the implied cap would be four. If not, we would do the process again with a cap of three, and so on.

Method #2 requires us to treating markets with HHIs that are *already* below 1800 in a different way. For these markets, we simply take the number of stations owned by the largest owner as a hypothetical cap, and add one.

Why do we add one, not more, not less? This reflects the result of a thought experiment in which the largest owner(s) could add one more station, and all other owners could engage in mergers and acquisitions until they own as many stations as the largest owner would. We imagine that these mergers increase the HHI as much as possible, since the goal of this justification exercise is to calculate a cap that prevents an HHI over 1800. As it happens, such hypothetical merger activity would push the HHIs in all of these markets up to the brink of 1800, if not over 1800.

Finally, to calculate the overall average implied cap for each market group, one simply averages the two kinds of implied caps (for markets over 1800 and for markets under 1800) across all markets. Table 2-7 reports the results for each market group, breaking out the calculations for the markets *within each group* with HHIs over and under 1800, and reporting the overall average implied cap in the right-most column.[23]

Table 2-7. Justifying a Numeric Local Ownership Cap, Method #2.

Market Group	HHI ≥ 1800		HHI < 1800		Overall Average Implied Local Ownership Cap Based on Method #2
	Number of Markets	Average Cap Needed to Bring HHI Below 1800	Number of Markets	Average Number of Stations Owned by Largest Owner	
1	1	5.0	11	7.5	**8.2**
2	9	4.0	4	6.8	**5.2**
3	23	3.1	4	6.0	**3.7**
4	20	2.9	3	5.0	**3.3**
5	34	2.5	4	6.3	**3.0**
6	30	2.3	2	6.5	**2.7**
7	19	2.2	4	4.8	**2.8**
8	38	1.6	1	4.0	**1.7**
9	30	1.5	9	5.3	**2.6**
10	14	1.1	9	4.1	**2.7**
11	14	0.9	9	3.3	**2.3**
12	0	n/a	5	4.2	**5.2**

The average caps implied in Table 2-7 are lower that the actual averages of the local ownership caps in every market group except market group 1. (For comparison, you can refer back to the average actual caps reported in Table 2-5.) Even for market group 1, the caps implied by method #2 are only slightly greater than the actual caps. Therefore, method #2 can justify numeric local ownership caps lower than the existing caps in every Arbitron market except the 12 members of market group 1, i.e. the 12 very largest Arbitron markets.

Whether one prefers method #1 or method #2, the end conclusion is the same. Numeric caps at the current level *or even lower levels* are needed to protect the public, the small-business community, and the political sphere against excessive market concentration. These numeric caps are easy for Congress and the FCC to promulgate and enforce and easy for the public to understand. For all these reasons, the current Local Radio Ownership Rule—or a Rule with even more stringent numeric caps—is justified.

[23] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

The Local Ownership Index: A Proposed Metric Capturing One Aspect of Localism

Ownership of local radio has become more nationalized over the past decade. This section introduces an index created by Future of Music Coalition for measuring the level of local ownership in local markets over time:

- Future of Music Coalition's Local Ownership Index is constructed by averaging the localness of each station's owner in a local market, where localness is measured as one minus the fractional geographic reach of each owner.
- In 1995, the average index was 97.1 across the 297 Arbitron markets, but by 2005 the average index was 69.9, representing a 28 percent drop in local ownership in just ten years.
- The average Local Ownership Index across market groups has declined from its 1995 range of 93 to 99 to a range in 2005 of 64 to 82.
- Restoring the Local Ownership Index to even 90 percent of its 1995 levels would, in most markets, require licensing dozens of new full-power and low-power stations, as well as re-allocating digital audio broadcast spectrum, to new, completely local entities.

So far, this chapter has focused on competition within local markets—the concentration of listenership ratings or advertising revenue. But the FCC has two other important policy goals to pursue, namely diversity and localism. In this section, we focus on localism, and introduce a method we created to measure one particular aspect of localism. The Local Ownership Index we introduce here measures the geographic footprint of radio companies—and tracks the recent shift from local to national control.

Local Ownership as One Component of Localism

As explained in the introduction to this chapter, localism means serving the interests of a local community as separate and distinct from that community's identity as part of the nation or the world. It pertains to where programming is produced, who produces it, and whether that programming meets local communities' and local residents' needs.

Many factors, most of them qualitative rather than quantitative, constitute this notion of localism. With this section we do not mean to underemphasize or overshadow the qualitative aspects of localism, such broadcasters having in-depth knowledge of local government or showcasing the music local bands on the air. But we believe that at least one aspect of localism is quantitative: local ownership.

Statistics about whether owners of radio stations are locally based, as opposed to being spread out regionally or nationally, are relevant if one subscribes to a theory that local ownership should be favored. Assume, for the sake of argument, that local owners and employees do the best job of assessing local preferences and needs and providing the appropriate programming to meet those preferences and needs. Under this theory, a locally owned company with locally based employees would be most preferable. Next would be a

nationally owned company with local program directors, local DJs, and a local office. Least preferable would be nationally owned station without a local office. The local ownership index shows that, if such a theory is correct, we are not getting the most preferable kind of ownership of our radio station. Our Local Ownership Index measures how close a local market comes to the most preferable version of localism.

Even if one disagrees with the above theory, the Local Ownership Index still has value as a measure of radio's nationalization. The lower the index, the more nationalized the local market. In this way, the Local Ownership Index takes the national-market concerns of Chapter 1 and connects them to the local markets we have discussed here in Chapter 2. If nationalization threatens competition, diversity, or localism in local markets, then the Local Ownership Index provides a useful measure to document the threat.

Localness as the Opposite of Geographic Reach

We define local ownership by using a measure we introduced in Chapter 1, *geographic reach.* This measure applies to owners of radio stations and is calculated nationwide. The geographic reach of an entity (whether a company, organization, or individual) is the number of states, markets, counties, or cities in which that entity owns stations. The smaller the geographic reach, the more local a radio company is. The most local a company can be is to own stations in only one state, one market, one county, and one city. On the opposite end of the spectrum, a company might span dozens of states or hundreds of markets.

We can express geographic reach as a fraction. As of 2005, there were 51 states (including the District of Columbia), 297 markets, 1,632 counties, and 4,664 cities in which radio stations have their broadcast towers.[24] So the *fractional geographic reach* across markets, for instance, would be the number of markets in which a company has stations, minus one, divided by the total number of markets in which there are radio stations (or 297) minus one.[25] To take a concrete example, Radio One has stations in 22 Arbitron markets. So its fractional geographic reach is 22 minus 1 divided by 297 minus 1, that is, 21 divided by 296, or 0.07. This measures Radio One's reach beyond a single locality.

We turn fractional geographic reach around, subtracting it from one, to measure localness. For Radio One, this figure across markets would be one minus its fractional geographic reach: 1 minus 0.07, or 0.93. For a one-station entity—which can only inhabit one city, county, market, and state—this measure of localness would equal 1. For a hypothetical entity that spanned, say, every state in the U.S., this figure would be 0 when measuring localness with respect to states.

[24] The number of counties and cities in which radio stations have towers has increased between 1975 and 2005. Calculations of the Local Ownership Index over time take these increases into account.

[25] Why subtract one from both the numerator and denominator? This makes the fractional geographic reach equal to zero when an entity exists in only one state, one market, one county, or one city. Every entity with a radio station must have radio stations in at least one state, one market, one county or one city, so it makes sense to set the fractional geographic reach equal to zero (and thus the localness measure to one) for the most local station owner possible.

Constructing the Local Ownership Index

From this measure of localness, we created a measure of local ownership that applies to markets. The Local Ownership Index is based on averaging the localness (that is, one minus the fractional geographic reach) of the owners of each station within an Arbitron market.

The measure of localness we employ is very close to one for all but the very largest companies. For one example, notice that Radio One's localness measure with respect to states is 0.93, despite the fact that Radio One is among the fifteen largest radio companies in the U.S. For another, consider that Clear Channel's localness measure with respect to cities is 0.87, since Clear Channel has stations in 634 cities.

To make the index more useful, and to better highlight the differences between markets with more and less local owners, each localness index is equal to the number 100 raised to the power equal to the average localness in a particular market with respect to some geographical measure (whether states, markets, counties, or cities). With this mathematical transformation, we create a localness index that falls anywhere between 1 and 100, with 100 representing the most local ownership possible. We use four geographical measures (states, markets, counties, and cities), calculate a localness index for each, and average them to get the composite Local Ownership Index.

Usually the four different measures of localness corresponding to the four geographical measures are highly correlated. But we average all four measures to differentiate between regional companies (which would span many cities but not many states) from truly national companies (which would span many cities and states).

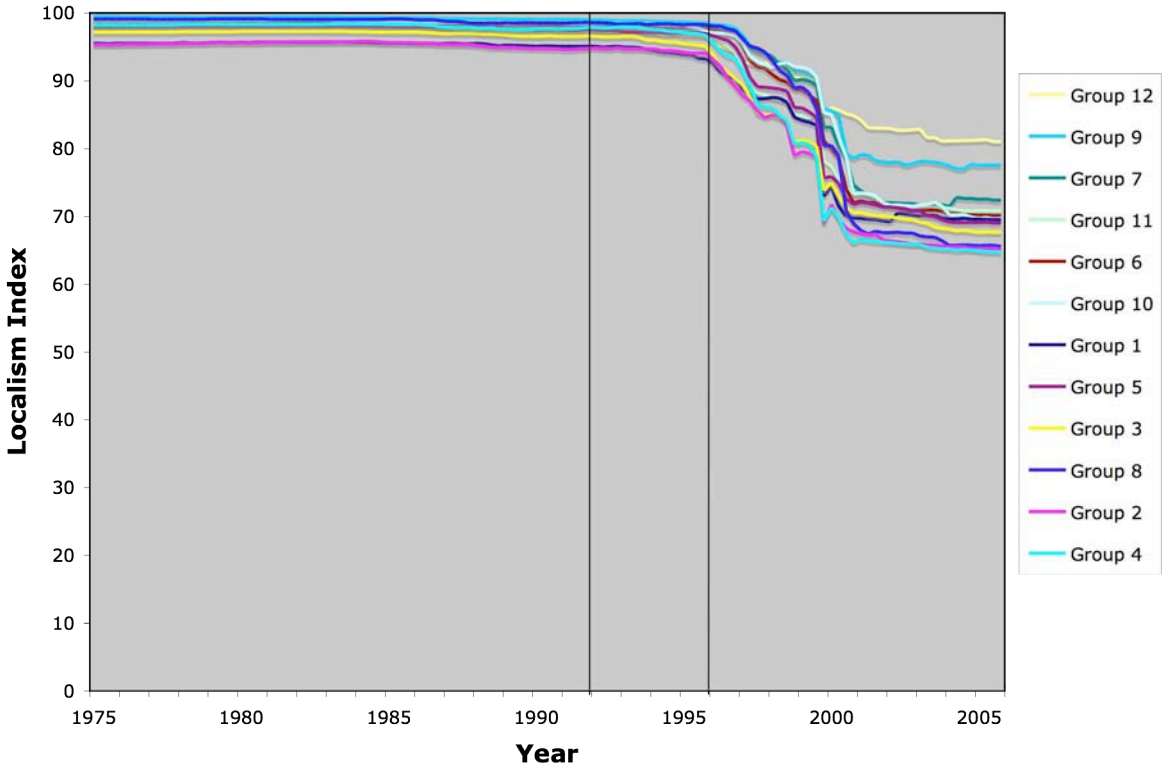
Changes in the Local Ownership Index Over Time

Figure 2-6 displays the average Local Ownership Index within each of the 12 market groups, from 1975 to 2005.[26] Vertical lines denote both the 1992 increase in the local ownership caps and the Telecommunications Act of 1996. In the legend for Figure 2-6, the market groups are listed in descending order of the 2005 average Local Ownership Index.

The average index in each market group stayed basically the same—at levels between 93 and 99—from 1975 through 1996. After that, the Local Ownership Index has declined significantly in most markets. As Figure 2-6 illustrates graphically, in Fall 1995, the market group averages for the Local Ownership index ranged from 93.29 (group 1) to 98.57 (group 9). By 2005, the market group averages ranged from 64.78 (group 4) to 81.03 (group 12). The vast majority of markets have experienced a decline in local ownership, as one would have expected.

[26] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 2-6. Local Ownership Index, 1975-2005, Average by Market Group.



As Figure 2-6 shows, the Telecom Act had a larger effect on the Local Ownership Index than the 1992 increase in the local caps. Both the elimination of the national ownership cap and the further increase in the local ownership caps—changes that came together in the 1996 Telecom Act—caused the decline in the Local Ownership Index. Removing the national cap allowed radio companies to spread out nationwide, while relaxing the local caps allowed the new national radio companies to purchase a greater share of the stations in each local market.

There is not a clear correlation between the population of a market and its Local Ownership Index. The large markets of group 2 and the small markets of group 8 each have some of the lowest levels of the Local Ownership Index.

There is, however, some relationship between the local commercial share (LCS) in a market and its Local Ownership Index. Recall the example of Nassau-Suffolk as a low-LCS market earlier in the chapter. Market groups 10, 11, and 12, which each contain Arbitron markets with low LCS, have some of the higher figures for the Local Ownership Index. Thus, the stations which are home to these low-LCS markets tend to be locally owned. One might explain this by saying that the large, geographically spread-out companies can obtain profitable market shares in these low-LCS markets with stations from nearby markets and without stations that are home to those markets.

The Local Ownership Index varies considerably across individual markets, but one can still see a downward trend among them. In Fall 1995, the index ranged from a low of 89.86 (in Battle Creek, MI) to a high of 99.99 (in four different markets). In Fall 2005, the index ranged from a low of 28.42 (in Sussex, NJ) to a high of 99.88 (in Sebring, FL).

Interpreting the Local Ownership Index: Some Hypotheticals

The Local Ownership Index we have constructed has a scale from 1 to 100. But all the actual measured values for the Local Ownership Index (for the years 1975 to 2005) fall between 27 and 100, and most values fall between 50 and 100. This is because low values of the index correspond to extremely high levels of ownership consolidation. For instance, a value of 1 represents an extreme in which every station in the market is owned by a company that owns station in every single state, market, county, and city—such a situation is implausible, especially with a local ownership cap in place.

A value of 10 represents a market in which the average station is owned by a company that owns stations in half the states (26), half the markets (148), half the counties (817), and half the cities (2,348). This is also implausible under the current conditions in the radio industry, considering that the largest company, Clear Channel, has stations in 634 cities, not 2,348.

A value of 50 represents a market in which the average station is owned by a company that owns stations in 9 states, 46 markets, 247 counties, and 708 cities. This kind of figure actually occurs in many markets, especially those in which Clear Channel has a large presence. In those markets in which Clear Channel is particularly dominant, or splits the bulk market with one other national radio company, the values of the Local Ownership Index can get even lower than 50.

Restoring Localism: A Policy Proposal

We have shown that the Telecommunications Act of 1996 had a drastic impact on local ownership and thus, on one aspect of localism. Congress and the FCC could reverse this trend of declining local ownership in radio in three ways:

1. Change the licensing process such that new licenses go to entirely local entities and may only be transferred to entirely local entities
2. Use the digital audio broadcast (DAB) transition as occasion to reallocate spectrum to entirely local entities
3. License more low-power radio stations

Licensing of Full-Power Stations

First, the FCC could change the licensing process such that new licenses in each local market with an excessively low Local Ownership Index go to entirely local entities. "Excessively low" could mean a value for the index of less than 80 or less than 90, which today would include 217 or 243, respectively, of the 297 local markets. "Entirely local" or "completely

local" just means that the owner's geographic reach extends only to one state, one market, one county, and one city. These new licenses, once issued, would only be transferable to another entirely local entity.

The Digital Transition

Second, Congress or the FCC could re-allocate existing radio spectrum to entirely local entities. With the new technology of digital audio broadcast (DAB), the spectrum it takes to broadcast one stream of programming will now support three to five streams of programming. Right now, radio companies assume that they will retain their current spectrum and obtain this increase in capacity without being obligated to make additional compensation or to meet additional public interest obligations, something that FMC and many other public interest and media groups have urged the FCC to establish. But instead of letting existing owners of radio stations have this advantage, the FCC could take some of it back—especially in markets with excessively low Local Ownership Indexes. Once the transition to DAB was made, local ownership would increase.

Low-Power FM Licensing

Third, Congress or the FCC could allow more low-power radio stations to be licensed, especially in more populated areas. Schools, church groups, union locals, and other organizations could benefit from these small-broadcast-radius stations. Unfortunately, fewer than 1000 low-power stations have been licensed to date nationwide—about three per Arbitron market. Three wholly local low-power stations only mitigate the decline in local ownership, as measured by the Local Ownership Index, a tiny amount. Significant increases in low-power licenses would be necessary to reverse the trend of the past decade.

Table 2-8: New, Completely Local Stations Needed to Restore the Local Ownership Index to 90 Percent of Its 1995 Level, by Market Group.

Market Group	Average Current Number of Stations	Average Number of ADDITIONAL, Fully Local Stations Needed to Reach 90 Percent of 1995 Local Ownership Index
1	76	91
2	52	94
3	43	82
4	37	94
5	30	66
6	27	65
7	21	50
8	19	66
9	16	30
10	13	32
11	15	38
12	22	26

Big Changes are Needed to Restore Local Ownership of Radio

Table 2-8 shows that, in many markets, dozens of additional, locally owned stations would be needed to restore the Local Ownership Index to even 90 percent of where it stood in 1995.[27] But, as we have explained in this section, Congress and the FCC have three viable methods at their disposal to increase localism in local markets: new full-power licenses, reallocation of spectrum in light of the DAB transition, and new low-power licenses.

Appendix E reports the Local Ownership Index for each Arbitron market in 1975, 1985, 1995, and 2005, as well as the number of new, completely local stations needed to restore the index to 90 percent of its 1995 level.

Conclusion

Local radio has been transformed by the twin trends of consolidation and nationalization over the past decade. Regulatory changes by the FCC in 1992 and more dramatic changes by Congress in the Telecommunications Act of 1996 increased the overall local ownership cap, unleashing both trends. Making things worse, the FCC's method of market definition allowed even greater consolidation in over one hundred local markets.

Potential problems associated with highly concentrated market share—higher prices for any goods advertised on radio, lower quality of programming, reduced variety of programming, and even the facilitation of payola-like practices—suggest that the FCC should aim to reduce concentration in local markets. Keeping the Herfindahl-Hirschman Index below the danger zone of 1800 or above should be a target for the FCC. In pursuit of that goal, numeric caps even lower than the existing caps would be justified. This would advance all three of the policy goals that Congress has mandated for the FCC: competition, diversity, and localism.

Raising the local caps also led to a historic nationalization of ownership in radio, especially because raising the local caps was combined in the Telecom Act with eliminating the national ownership cap. But technological advances like digital audio broadcast could allow more licensees to use the radio spectrum. This gives Congress and the FCC an opportunity to reverse, at least in part, increasing consolidation and decreasingly local ownership. An influx of new, completely local owners would ameliorate both the dangers of consolidation and the harms that might accompany radio companies' geographic expansion far beyond the local communities they are required to serve.

[27] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Chapter 3
Programming

The recent, drastic consolidation of radio ownership documented in Chapters 1 and 2 raises concerns in its own right. Power of the media can translate into political, economic, and social power. Concentrating that power in the hands of relatively few companies, organizations, and individuals—entities that are increasingly national, not local—goes against the FCC's directives to promote competition and localism. But what about the FCC's third policy goal of promoting diversity?

Addressing diversity requires us to examine the programming that radio stations broadcast. In studying programming, we experience the constraints of the data available to us. A comprehensive historical database extending to the period before the watershed Telecommunications Act of 1996 does not exist. Much worse, the data available are relatively broad-brush. In general, the data available for purchase at an affordable price and the data we can collect ourselves do not feature the detail to pinpoint individual syndicated programs or individual songs.

Instead, we rely largely on data about programming formats. A format is a kind of brand name that tells listeners about the programming they will hear on a station, whether that means songs from a particular musical genre, local news stories, information in a foreign language, or professional sporting events. Formats give us some useful information but are not the whole picture. Thus, we also look at the charted playlists of some music-radio stations.

Even with perfect data, diversity is a difficult concept to measure, and the FCC has understandably had trouble proposing a quantitative measure for diversity. Diversity can refer to anything from diversity of political viewpoints to ethnic diversity, or from programming-format variety to ownership variety. Part of this chapter will discuss format variety as one way to measure diversity. But one must acknowledge, as we emphasized in our 2002 report, the difference between variety and diversity. Diversity is a more robust but more difficult concept to quantify.

This chapter will use a range of perspectives to study radio programming and what it means for programming diversity in the wake of the recent wave of consolidation. It will show:

- **Homogenized Programming:** Just fifteen formats make up 76% of commercial programming.
- **Large Station Groups Program Narrowly:** Owners who exceed or exactly meet the local ownership cap tend to program heavily in just eight formats.

- **Only Small Station Groups Offer Niche Formats:** Niche musical formats like Classical, Jazz, Americana, Bluegrass, New Rock, and Folk, where they exist, are provided almost exclusively by smaller station groups.
- **Small Station Groups Sustain Public-Interest Programming:** Children's programming, religious programming, foreign-language and ethnic-community programming, are also predominantly provided by smaller station groups.
- **Format Overlap Remains Extensive:** Radio formats with different names can overlap up to 80% in terms of the songs played on them.
- **Individual Stations Use Highly Similar Playlists:** Playlists for commonly owned stations in the same format can overlap up to 97%.
- **Network Ownership Is Also Concentrated:** The three largest radio companies in terms of station ownership are also the three largest companies in terms of programming-network ownership.

About Programming Formats

In this section, we introduce the subject of programming formats by:

- Explaining what programming formats are and provide some examples
- Detailing how information about programming formats is collected
- Describing our approach to interpreting the available programming-format data.

It is easiest to explain radio programming **formats** by naming a few: Country, Sports, Adult Contemporary, Smooth Jazz, News, Rock, Classical, and so on. Musical radio formats developed as a way to signal to listeners that they could expect to hear songs from particular artists or from particular musical genres. Other formats developed in an analogous way to describe the programming one might hear; for example, a station branding itself with the Talk format would signal to listeners that they could expect to disk jockeys talking, interviewing guests, and taking listeners' calls, with only the occasional song thrown in.

Some people might not find a format label like Alternative to be meaningful. So-called alternative music has definitely shifted and evolved over the years, especially in terms of radio stations' playlists. But a programming format name like Alternative remains usefully descriptive to some extent. If it were not, stations would not advertise themselves with their format names, with slogans like "the new rock Alternative" or "today's Top 40."

How Data on Formats Are Collected

The data we use to measure programming formats come from an industry consulting firm called BIA Financial Networks (BIA). BIA surveys radio stations on a regular basis and asks them to describe their programming format. They have electronic data on formats going back to Spring 1996, just after the Telecommunications Act was passed. (Unfortunately, no data from prior to that date are available in electronic form from BIA or anyone else, to our knowledge.)

There are approximately 120 different names for programming formats that appear at some point in BIA's data for 1996 through 2005.[1] Some formats are very prevalent (like News), and some very rare (like Folk). A small number of new formats have appeared over this time period, like "Jack," a format largely featuring songs from the same musical genre as the Classic Rock format does, but with a longer playlist. An even smaller number of formats disappeared over time. Sometimes a format disappears just because a new name for the format becomes popular—as when Black Adult Contemporary became Urban Adult Contemporary.

When BIA collects data about a station's format, the station provides a **primary** format, a **secondary** format, and a **tertiary** format.[2] This often reflects the fact that radio stations can offer different kinds of programming during different parts of the week or different times of day. For example, a station might offer Classical in the morning, Jazz at the noon hour, and Rock in the afternoon and evening. This station's format might be captured as "Rock/Classical/Jazz," demonstrating the relative prevalence of each kind of programming for that particular station. On the other hand, if another station played country music all day, then BIA would designate its format as "Country" with no secondary or tertiary formats indicated.

Increasing Sophistication of the Data

Over time, as BIA has grown as a company, expanded its staff, and developed data-collecting expertise, it has been able to collect more detailed data. In the format data for 1996, most stations just had a primary format—no secondary or tertiary format. But in the format data for 2005, many more stations had primary, secondary, and tertiary formats listed in BIA's database.

One can see the increasing sophistication of BIA's data in the rapidly increasing number of primary-secondary-tertiary format combinations. In Spring 1996, there were 282 different combinations for the commercial stations in BIA's database. By Spring 2005, there were 763 such combinations for commercial stations.[3]

This growth in the number of primary-secondary-tertiary format combinations is too large to be believed as a true measure. In other words, it is unlikely that radio stations were 2.7 times more likely to split their programming week or day into multiple parts. Nor is this 170 percent growth explained by the growth in the number of licensed commercial stations, which is only 9 percent over that period. It is much more likely that BIA has simply collected increasingly detailed format data over the period from 1996 to 2005.

The radio industry's deeply flawed method of measurement counts every unique combination of primary-secondary-tertiary as a unique format. But this method implicitly asserts that the industry has developed almost five hundred new programming formats over the last decade.

[1] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[2] See any recent edition of Media Access Pro (Radio Version), BIA Financial Networks.
[3] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Our more accurate method of measuring format variety acknowledges that most of the new format names actually involve a recombination of old format names.

For example, the radio industry and its consultants would like to give themselves credit for increasing innovation. When they count up how many programming formats are available in a market, for instance, they count:

Rock/Classical/Jazz
Rock/Jazz/Classical

as two completely different formats.

We argue that this produces misleading results. If a market already has a Rock/Classical/Jazz station, then adding a Rock/Jazz/Classical station does not add as much variety—let alone diversity—than a Zydeco station would.

A Sensible Way to Measure Formats, Correcting for BIA's Increasing Sophistication

To measure formats properly, we separate out the primary, secondary, and tertiary formats and assign weights to them. These weights reflect the idea that the programming week or day for each station may be split between different types of programming.

If a station has only a primary format in the BIA database, then that format gets a weight of 100%. If there are a primary and secondary format listed, but no tertiary format, then the primary format gets a weight of 60% and the secondary format gets a weight of 40%. If there are primary, secondary, and tertiary formats listed, then the weights are 48%, 32%, and 20%, respectively.

We cannot know from BIA's database exactly how each station chooses programming, so we assign weights in the same way for every station. The weights are arbitrary, but applied uniformly across all stations. The weights are designed so that the ratio of primary to secondary programming is **1.5:1** (that is, the primary format is assumed to receive 50% more airtime than the secondary format). When there's a tertiary format as well, the radio of secondary to tertiary programming is similar, at **1.6:1**.

This method avoids the problem of treating Rock/Classical/Jazz (to continue with the example above) as completely different from Rock/Jazz/Classical. Instead, our method counts the number of **station equivalents** to measure fractional amounts of a station's broadcast day or week. Using this measure, a market that starts with a Rock/Classical Jazz station has:

0.48 station equivalents programming Rock,
0.32 station equivalents programming Classical, and
0.20 station equivalents programming Jazz.

When we add a Rock/Jazz/Classical station to this market, the counts become:

0.96 station equivalents programming Rock (0.48 + 0.48),
0.52 station equivalents programming Classical (0.32 + 0.20), and
0.52 station equivalents programming Jazz (0.20 + 0.32).

Our method of counting reflects that these two stations in our hypothetical market are really offering three different musical genres to the public, not just two. But instead of finding that variety has doubled when the second station was added, we find that the array of programming formats available—three—is unchanged. What has changed is *how much* of those three programming formats—Rock, Classical, and Jazz—are available. For these reasons we find our method of measuring format variety to be much more accurate for describing exactly what kinds of programming are available to the public.

The Most Common Programming Formats

This section shows that:

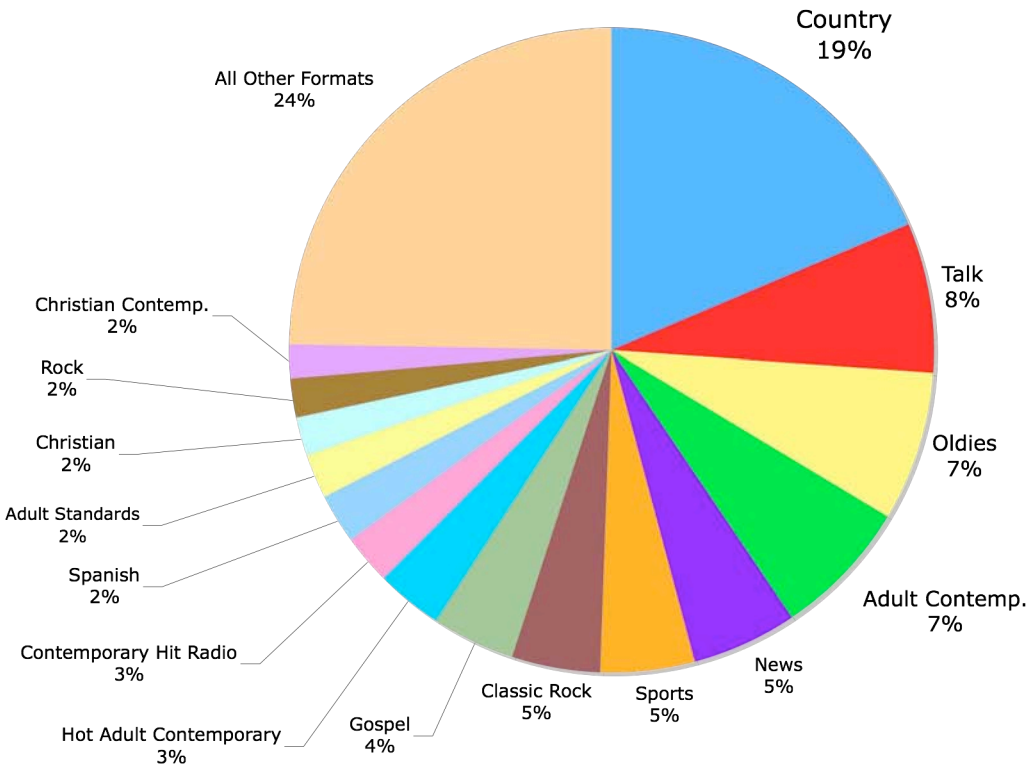
- Just fifteen formats make up 76% of commercial programming.
- Noncommercial radio provides a very different set of programming formats than commercial radio.
- Sports, Talk, and Classic Rock are the fastest-growing formats over the last decade.

Using the method described at the end of the previous section, we can document the relative frequency of the 120 different programming formats that appear in BIA's database (whether as primary, secondary, and tertiary). We start by looking at the 10,761 commercial stations broadcasting in Spring 2005 for which we have data from BIA on their programming formats.

Figure 3-1 shows the dominance of the Country format on commercial radio nationwide.[4] As of Spring 2005, we estimate that Country garnered 19% of the airtime on commercial stations. (Country's dominance is slightly on the wane; in Spring 1996 the Country format received an estimated 25% of the airtime.) Just fifteen formats make up 76% of commercial programming, as shown in Figure 3-1. In Spring 1996, the top fifteen formats made up 79% of commercial programming.

[4] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 3-1. Programming Formats Among Commercial Stations, Spring 2005.



These figures should only be treated as rough estimates, because BIA's data from 1996 are much less precise than its 2005 data, as discussed in the previous section. But even with these rough figures we can see that the vast increase in the concentration of radio ownership has done little to change the concentration of programming formats.

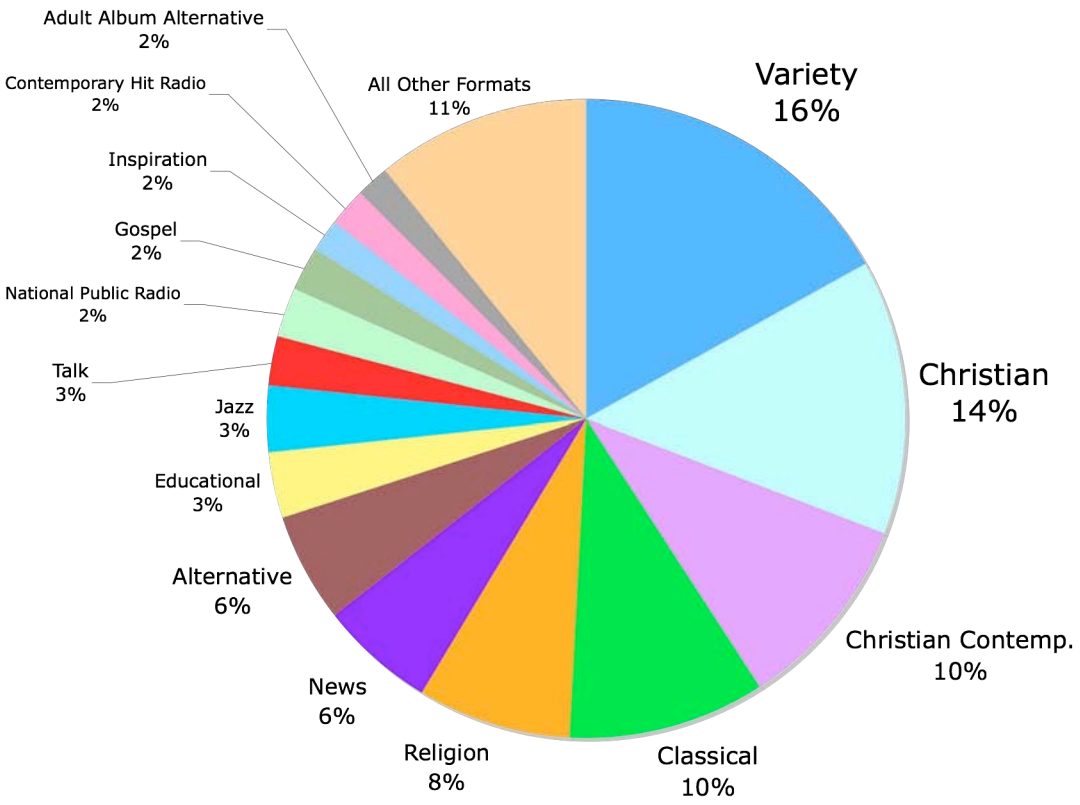
Appendix F catalogs the prevalence of all programming formats in commercial radio for Spring 1996 and Spring 2005.

Different Offerings from Noncommercial Stations

Figure 3-2 displays the analogous information to Figure 3-1, but for the 2,601 noncommercial radios stations for which we have data.[5] The picture of noncommercial radio is quite different. What are uncommon formats in the world of commercial radio—formats like Classical, Jazz, and Gospel—are in the top fifteen formats for noncommercial radio.

[5] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 3-2. Programming Formats Among Noncommercial Stations, Spring 2005.



Another important difference between commercial and noncommercial radio is the difference between secular and religious programming. Fully 36% of the programming on noncommercial radio was religious programming of some sort as of Spring 2005. This increased from 31% in 2001, and includes formats like Christian, Religion, Christian Contemporary, Gospel, Black Gospel, Southern Gospel, Religious Music, and Inspiration. Commercial radio, by contrast, only featured 10% programming in religious formats.

In short, noncommercial radio is the primary source for art music, religious music, and other religious programming.

BIA's database only has information about noncommercial stations' formats in a more or less comprehensive fashion starting in 2001, so it is harder to track changes over time. But Appendix G displays the relative frequency of all programming formats in noncommercial radio for Spring 2001 and Spring 2005.

Format Growth and Format Disappearance

In the last decade, several formats, while not new to the radio dial, have experienced rapid growth. Table 3-1 shows the formats expanding the most since 1996.[6]

Table 3-1. The Ten Fastest-Growing Commercial Formats, by Number of Station-Equivalents Gained (Changes from 1996 to 2005).

Format	1996	2005	Station-Equivalents Gained	Change in Share of Total Airtime
Sports	203	505	+302	+2.5%
Talk	549	810	+261	+1.6%
Classic Rock	295	489	+194	+1.4%
Hot AC	166	354	+188	+1.5%
Adult Standards	68	236	+168	+1.5%
Rock	75	207	+132	+1.1%
Oldies	681	799	+118	+0.1%
Classic Hits	31	148	+117	+1.0%
Mexican	35	143	+108	+1.0%
News	462	565	+103	+0.3%

As Table 3-1 shows, first among these is Sports, followed closely by Talk. Some of the relatively new or previously uncommon formats that gained traction between 1996 and 2005 include Classic Hits and Mexican. Other popular formats, like Oldies, have simply grown in keeping with the expansion in the number of FCC-licensed stations.

Other formats have shrunk somewhat or have begun to disappear from terrestrial radio. The dominance of Country has dwindled somewhat, as documented in Table 3-2 (and as illustrated in Figures 3-1 and 3-2).[7] Adult Contemporary's share has also declined, partly because it has subdivided into Hot Adult Contemporary, Urban Adult Contemporary, Soft Adult Contemporary, Lite Adult Contemporary, and Mix Adult Contemporary. As we emphasized in our 2002 report, this may not reflect any increase in programming diversity. Rather, it may reflect only a change in branding strategies by radio companies. (The section on format overlap later in this chapter will explain further how formats with different names often feature the same songs.)

[6] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[7] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Table 3-2. The Ten Fastest-Shrinking Commercial Formats, by Number of Station-Equivalents Lost (Changes from 1996 to 2005).

Format	1996	2005	Station-Equivalents Lost	Change in Share of Total Airtime
Country	2377	2011	-366	-7.0%
Adult Contemporary	1012	740	-272	-4.1%
Nostalgia	209	115	-94	-1.2%
Album Oriented Rock	165	74	-91	-1.1%
Middle of the Road	73	18	-55	-0.6%
70s Oldies	58	8	-50	-0.6%
Religion	199	152	-47	-0.8%
Easy Listening	86	46	-40	-0.5%
Full Service	90	52	-38	-0.5%
Big Band	39	15	-24	-0.3%

Surprisingly, despite demographic trends toward an aging population, formats focused on older listeners like Nostalgia and Big Band have seen their airtime decline markedly. Other formats from the earlier days of radio, like Full Service, Middle of the Road, and Easy Listening, have also fallen out of favor.

In other cases of declining format shares, as with the Album Oriented Rock, 70s Oldies, and Religion formats, radio stations are probably using different or more specific names for similar programming. In those examples, the formats are now more often labeled Classic Rock, 70s Hits, and Christian, respectively.

Niche Formats

In this section, we examine the fate of so-called **niche formats**, that is, formats less commonly offered by radio stations. We find that:

- Fewer stations feature Classical or Jazz as their primary format, but the overall amount of airtime for these formats has remained approximately the same.
- Niche formats, as the "long tail" of the radio industry, show some signs of increasing profitability.

It is difficult for any policy analyst to specify what set of programming formats *should* be offered on the radio. On the other hand, the FCC's diversity and localism goals require the agency to evaluate whether radio is serving the public interest along those dimensions. So we suggest an approach to analyzing formats that looks at the availability of niche formats. The most popular formats—that is, those fifteen formats making up three-quarters of commercial radio—are available in most markets (though certainly not always). But niche formats are often missing from the radio picture.

Disappearing Classical and Jazz Radio?

Some niche formats are believed to be disappearing from the radio dial. Popular press accounts of stations changing formats away from Classical and Jazz, especially, have led some people to believe that these formats are struggling. BIA's data cannot provide information about specific playlists in these formats. Thus we cannot analyze the quality of programming or the changing character of programming choices. But we can talk about the simple frequency with which radio stations broadcast in these formats.

Table 3-3. Classical and Jazz Programming.

Type	Format	2001		2005	
		Estimated Station-Equivalents (with % of total)	Number of Primary-Format Stations	Estimated Station-Equivalents (with % of total)	Number of Primary-Format Stations
Commercial	**Classical**	34.76 (0.33%)	37	33.56 (0.31%)	36
	Jazz	16.60 (0.16%)	14	10.72 (0.10%)	8
Noncommercial	**Classical**	248.56 (10.6%)	272	251.60 (9.7%)	267
	Jazz	75.20 (3.2%)	63	82.04 (3.2%)	69

Table 3-3 shows that the small number of commercial stations that program Classical or Jazz decreased between 2001 and 2005.[8] Fewer commercial stations have Classical or Jazz as their primary format.

Using our method of separately accounting for primary, secondary, and tertiary formats—rather than borrowing BIA Financial Networks' method of categorizing formats, as we did in our 2002 study—we are able to distinguish Jazz from Smooth Jazz. This provides us with a more precise view of Jazz radio than in previous or other organizations' reports.

In the noncommercial sector, the picture is more mixed. The absolute number of station-equivalents devoted to Classical and Jazz has increased. But the percentage of total noncommercial airtime declined for Classical, and merely held steady for Jazz. The number of noncommercial stations listing Classical as their primary format declined, reflecting a small trend of Classical stations switching to a News/Classical combination. The number of noncommercial stations with Jazz as their primary format actually increased.

Recall from Chapter 1 that the total number of commercial stations grew slightly from 2001 to 2005, and that the number of noncommercial stations grew even more during that time.

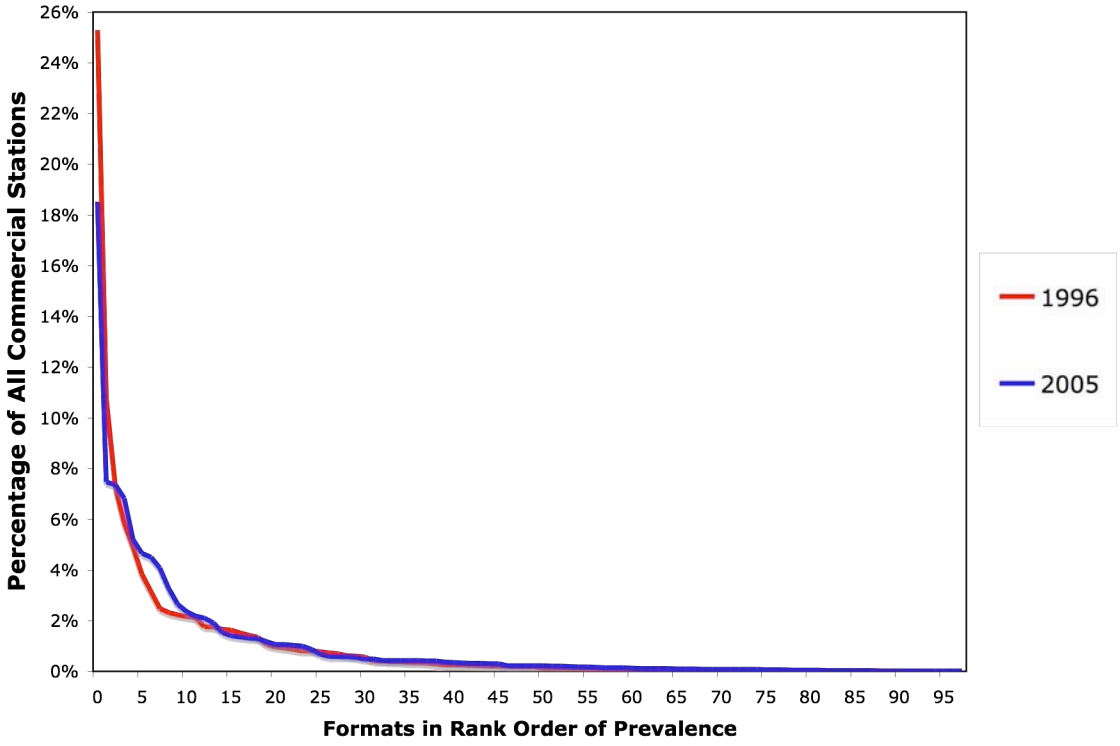
[8] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

What Table 3-3 shows is that, in the context of more stations being licensed, the percentage of the total airtime across all stations devoted to both Jazz and Classical has declined.

Neglecting the Long Tail of Radio Programming Formats

Chris Anderson's book *The Long Tail* has popularized a way of thinking about product markets.[9] What percentage of the market is captured by how large a percentage of the product offerings? If we takes this kind of approach to radio offerings, we can observe how traditional radio devotes a large percentage of its airtime to a relatively small set of formats.

Figure 3-3. Distribution of Programming Formats, Spring 1996 vs. Spring 2005.



The horizontal axis of Figure 3-3 reflects a list the formats offered on commercial radio, sorted in descending order of airtime devoted to them.[10] The vertical axis is simply the percentage of airtime devoted to each format. So, from left to right, Figure 3-3 graphs the percentage of airtime devoted to the most popular format, to the second-most popular format, and so on.

Figure 3-3 displays the "long tail" graphs for commercial radio in 1996 and 2005 simultaneously to show the lack of contrast between them. While the most popular format, Country, had become less prevalent by 2005, the rest of the long tail graph looks fairly

[9] Chris Anderson, *The Long Tail: Why the Future of Business is Selling Less of More* (Hyperion, 2006). See also Anderson's blog at http://www.thelongtail.com (last visited November 21, 2006).
[10] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

similar. There is not a lot of density at the tail of the graph—the so-called niche formats—but it is growing slightly.

In 1996, the top fifteen formats had 80 percent of the revenue for commercial stations. By 2005, the top fifteen's share had declined 6 percentage points to 74 percents. Turned around, that shows the long tail's growing share: in 1996, the other hundred or so formats had a 20 percent share of commercial radio revenue, but by 2005 they had 26 percent.[11] One other piece of evidence for niche formats' economic viability comes from online music sales. For instance, statistics from the online record label Magnatune, which offers music from a wide array of genres, Classical accounted for 4 of the top 10 titles by weekly album sales and for 19 of the top 50.[12]

Commercial radio is still overwhelmingly focused on a small number of formats. To reiterate, commercial radio devotes 75 percent of its airtime to just 15 formats. But the long tail graph and the concentration of revenue suggest that niche formats in the tail of the distribution of format frequency may be increasingly financially attractive. Perhaps the large radio companies have focused too much on cost-side efficiencies, offering a similar array of formats everywhere. Smaller station groups and noncommercial stations are fostering or developing niche formats, while large station groups are not, as we will see in the next section.

Programming of Large Station Groups Grandfathered Over the Cap

This section demonstrates that:

- Using our method of measuring format variety, we can compare the programming of station groups that are over, exactly at, or under the local ownership cap.
- Niche musical formats like Classical, Jazz, Americana, Bluegrass, New Rock, and Folk, where they exist, are provided almost exclusively by smaller station groups.
- Children's programming, religious programming, foreign-language and ethnic-community programming, are also predominantly provided by smaller station groups.

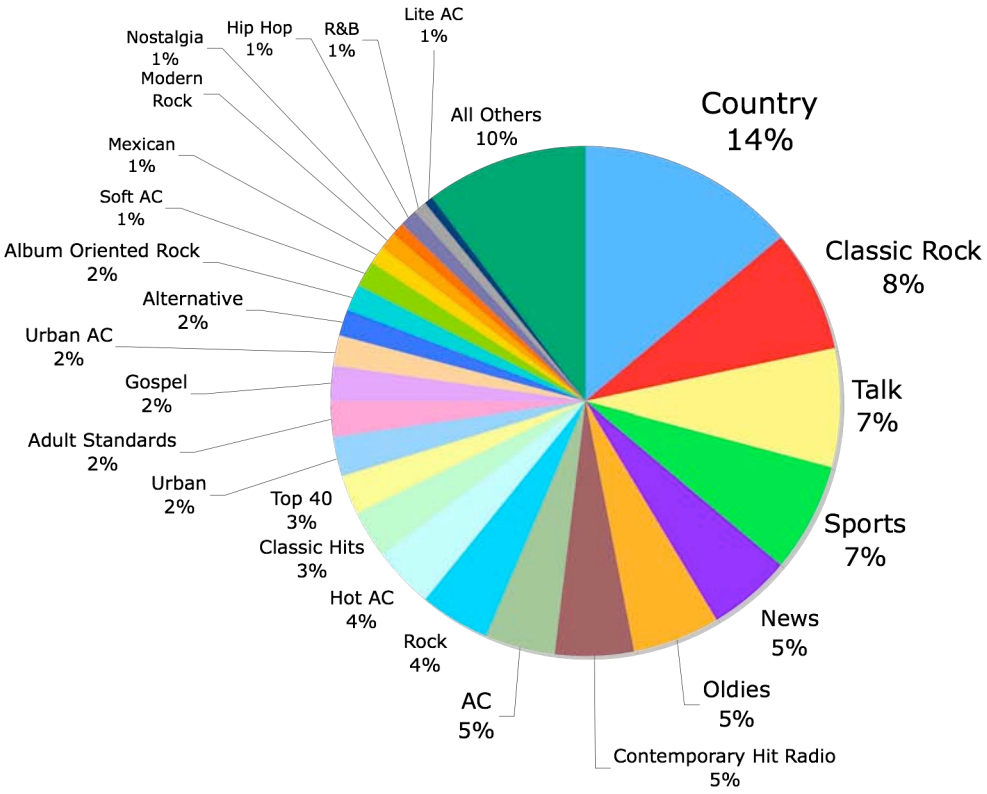
The FCC's Local Radio Ownership Rule, although relaxed by Congress in the Telecommunications Act,[13] still limits the size of station groups.[14] (A station group is a set of stations owned or controlled by a single company in the same local market.) But enforcement of this rule depends on the details. In Chapter 2, we discussed the FCC's signal-contour method of market definition and how it allowed more consolidation than would have

[11] Revenue calculations for Spring 2005 formats based on BIA's estimates for annual, station-level revenue in 2004. For symmetry, revenue calculations for Spring 1996 based on 1995 revenue. Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[12] Magnatune, "50 Best-Selling Albums This Week," *at* http://www.magnatune.com/info/stats/best_selling_this_week (visited November 20, 2006).
[13] Telecommunications Act of 1996 § 202(b).
[14] FCC Local Radio Ownership Rule, 47 C.F.R. § 73.3555(a) (2004).

occurred otherwise. In 104 markets, at least one station group exceeds the local ownership cap but has been grandfathered in.

In theory, large station groups offer radio companies an opportunity to offer the widest variety. It stands to reason that a station group containing, say, twelve stations could be more likely to offer a wider variety of programming formats than a station group with only four stations. So one might expect station groups in excess of the local ownership cap to offer programming in a wider range of programming formats. These groups do not simply have large numbers of stations—they also have more stations than their competitors. And the shift to an Arbitron market definition together with their grandfathered status protects them from competitors owning as many stations as they do.

Figure 3-4. Distribution of Formats Among Station Groups Grandfathered in Excess of the Local Ownership Cap.

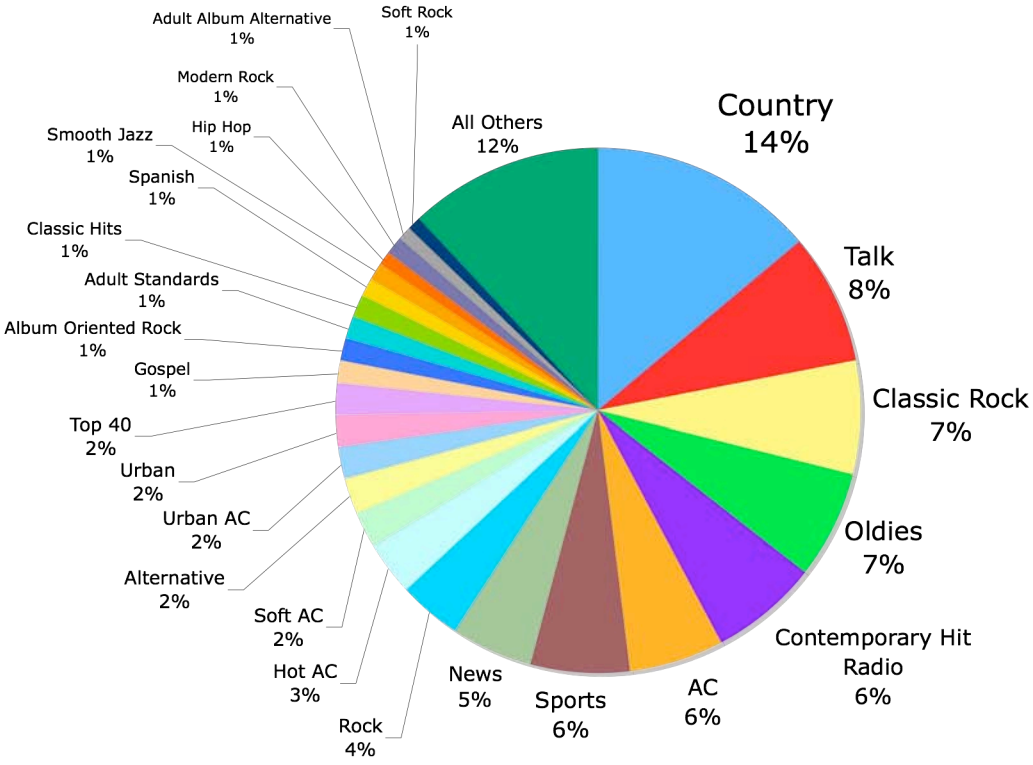


To measure programming variety among station groups in excess of the local ownership cap, one can simply calculate the number of station-equivalents for each format. Figures 3-4, 3-5, and 3-6 are pie charts showing the programming offerings of the aggregate set of station groups in excess of the cap, the aggregate set of station groups exactly at the cap, and the aggregate set of station groups below the cap, respectively.[15]

[15] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Figure 3-4 and Figure 3-5 are highly similar. The largest station groups—that is, those in excess of or exactly at the local ownership cap—focus on just a few formats. For those station groups in excess of the cap, the most frequent formats are (in order): Country, Classic Rock, Talk, Sports, News, Oldies, Contemporary Hit Radio, and Adult Contemporary. These eight formats alone make up 56 percent of their programming.

Figure 3-5. Distribution of Formats Among Station Groups Exactly Meeting the Local Ownership Cap.



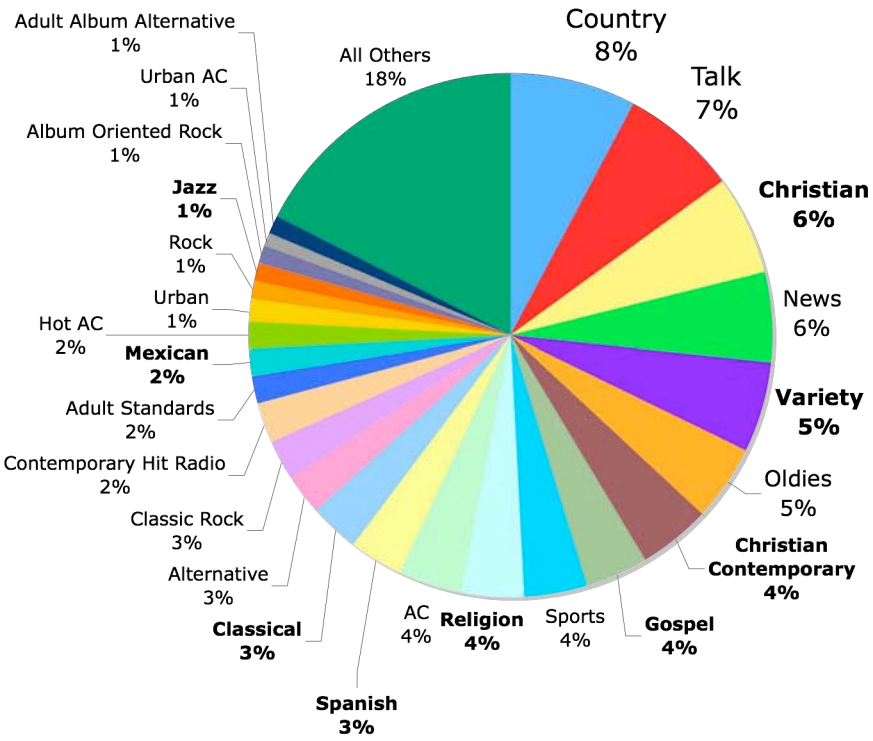
For those station groups with holdings exactly meeting at least one part of the local ownership cap, the most frequent formats are exactly the same, but in a different order: Country, Talk, Classic Rock, Oldies, Contemporary Hit Radio, Adult Contemporary, Sports, and News. For station groups at the cap exactly, these eight formats make up 59 percent of the programming.

The other format categories are underrepresented compared to the rest of radio. Among the largest station groups, Spanish-language formats are relatively underrepresented, as are religious-formats (both music- and talk-oriented formats). Meanwhile the Classical and Jazz formats are almost nonexistent among large station groups.

Figure 3-6 shows a different landscape exists for smaller station groups. This pie chart has the names of less common formats highlighted in bold. Classical and Jazz formats are more common. So are Spanish-language and religious formats. The balance across all

programming format categories is generally more even. It appears that a wider variety of programming comes from the relatively small station groups—not the large station groups that resulted from the FCC's signal-contour market definition. This finding casts doubt on any claims that larger station groups will offer the public a wider variety of programming.

Figure 3-6. Distribution of Formats Among Station Groups Strictly Below the Local Ownership Cap.



Less Common Formats

A company allowed to have holdings in excess of the Local Radio Ownership Rule's limits will have the most opportunities to program in specific niche formats within the BIA format categories discussed in the last section. For example, if a radio company has 10 stations in a local market in which all other companies are now limited to 7 stations, then those 3 stations in excess give an owner particular flexibility. Thus it is natural to ask whether radio companies in excess of the ownership caps tend to program more diverse or unusual formats.

Table 3-4. Formats Predominantly Provided by Station Groups Under the Cap.

Category	Format	Station-Equivalents			Percentage of Airtime		
		Under Cap	Exactly At Cap	Over Cap	Under Cap	Exactly At Cap	Over Cap
Music	Classical	177.04	3	3	3.0%	0.2%	0.3%
	Jazz	70.08	1.4	1.6	1.2%	0.1%	0.2%
	Big Band	13.2	0	0	0.2%	0.0%	0.0%
	Folk	6.76	0	0	0.1%	0.0%	0.0%
	Americana	7	0.2	0	0.1%	0.0%	0.0%
	Bluegrass	4.92	0	0	0.1%	0.0%	0.0%
	New Rock	15.8	1.2	0.8	0.3%	0.1%	0.1%
	Tropical	16.04	0.32	1.4	0.3%	0.0%	0.2%
	Variety	320.84	4.12	3.6	5.5%	0.3%	0.4%
	Eclectic	14.72	0	0	0.3%	0.0%	0.0%
	Diverse	6.4	0	0	0.1%	0.0%	0.0%
Religious Music	Christian Contemp.	259.96	9	4	4.4%	0.6%	0.5%
	Gospel	240.68	21.8	17.4	4.1%	1.5%	2.0%
	Black Gospel	24.6	4	2	0.4%	0.3%	0.2%
	Southern Gospel	17.48	0	1	0.3%	0.0%	0.1%
	Religious Music	10.84	0	0	0.2%	0.0%	0.0%
Office	Easy Listening	25.2	3	2.4	0.4%	0.2%	0.3%
	Beautiful Music	5.4	0	0	0.1%	0.0%	0.0%
Children's	Educational	54.92	0.4	0	0.9%	0.0%	0.0%
	Children	54.2	3	1	0.9%	0.2%	0.1%
News & Public Service	NPR	28.68	0	0	0.5%	0.0%	0.0%
	Public Svc.	8.4	0	0	0.1%	0.0%	0.0%
	Information	36.6	1.2	0.2	0.6%	0.1%	0.0%
	Business & Financial	17.72	3.2	0.48	0.3%	0.2%	0.1%
	Progressive	5.6	1	0	0.1%	0.1%	0.0%
Religion & Spirituality	Religion	222.56	2	2	3.8%	0.1%	0.2%
	Christian	349.4	7	2	5.9%	0.5%	0.2%
	Inspiration	48.6	0.8	0	0.8%	0.1%	0.0%
	Motivational	3.48	0	0	0.1%	0.0%	0.0%
Internat'l	Spanish	202.04	17.12	6.96	3.4%	1.1%	0.8%
	Mexican	100	8.92	10.04	1.7%	0.6%	1.2%
	Ethnic	44.28	5.8	0.92	0.8%	0.4%	0.1%
	International	5.12	0.4	0	0.1%	0.0%	0.0%
	Asian	6.8	1	1	0.1%	0.1%	0.1%
	Polish	4	0	0	0.1%	0.0%	0.0%
	Portuguese	3.8	0	0	0.1%	0.0%	0.0%
	Greek	2	0	0	0.03%	0.0%	0.0%
	Polka	1.2	0	0	0.02%	0.0%	0.0%
	Japanese	1	0	0	0.02%	0.0%	0.0%

One might think that large, grandfathered-in station groups offer radio companies an opportunity to experiment. As it happens, companies do not appear to take that opportunity. Looking at a group of ten less common music formats, one can compare the offerings of radio companies in markets where their holdings exceed the local ownership caps to the offerings of all other radio companies. This analysis, displayed in Table 3-4, looks only at stations in the 297 Arbitron-rated markets in the U.S.[16]

Table 3-4 shows the vast array of formats that are either not represented or proportionately underrepresented among the stations in large station groups. Many important music formats are missing, including Classical, Jazz, Americana, Bluegrass, and Folk. These are all formats in which local governments and the federal government (through the National Endowment for the Arts) have invested heavily,[17] yet they are absent from the large station groups' programming. As one agency of the U.S. government has worked to ensure that children learn about jazz and classical music in school, Congress and the FCC have allowed radio consolidation to foster large station groups that ignore those genres.

Furthermore, the smaller station groups are the sole source for whole other groups of radio formats: programming for children, religious programming, foreign-language and ethnic-group-focused programming, and certain categories of news and public service programming.

In sum, the musical variety across the Arbitron markets is coming from radio owners whose holdings are under the caps. Owners who exceed or exactly meet the local ownership cap tend to program heavily in the more common Country, Classic Rock, Talk, Sports, News, Oldies, Contemporary Hit Radio, and Adult Contemporary formats. Tired of reading the same list of eight formats again and again? Perhaps radio listeners are, too. Remember the 22 percent decline in listenership depicted in Figure 1-10 at the end of Chapter 1.

Overlap Between Formats

As an update to our 2002 study, we again demonstrate the sometimes extreme degree of overlap between programming formats with different names, showing that:

- Radio formats with different names can overlap up to 80% in terms of the songs played on them.
- Format overlap has maintained its high level between 2002 and 2006.

So far, we have taken the radio industry on its own terms in this chapter. We have declined to count a Rock/Classical/Jazz station as being all that different from a Rock/Jazz/Classical station. (Of course, we now know that no station in a large station group would have such a

[16] Source data: Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.
[17] See National Endowment for the Arts, "National Initiatives: National Endowment for the Arts Jazz Masters Fellowships," *at* http://www.nea.gov/national/jazz/index.html (visited November 21, 2006).

format, since it includes Classical and Jazz.) But aside from separating out stations' primary, secondary, and tertiary formats, we have used data provided by the industry itself to measure the diversity of programming on radio.

One problem with doing so has been that we have been treating formats with overlapping playlists like Adult Contemporary, Hot Adult Contemporary, Urban Adult Contemporary, Soft Adult Contemporary, Lite Adult Contemporary, and Bright Adult Contemporary as entirely different formats. Now we turn to another data source—the radio charts kept by Radio and Records magazine—to investigate how different these formats really are.

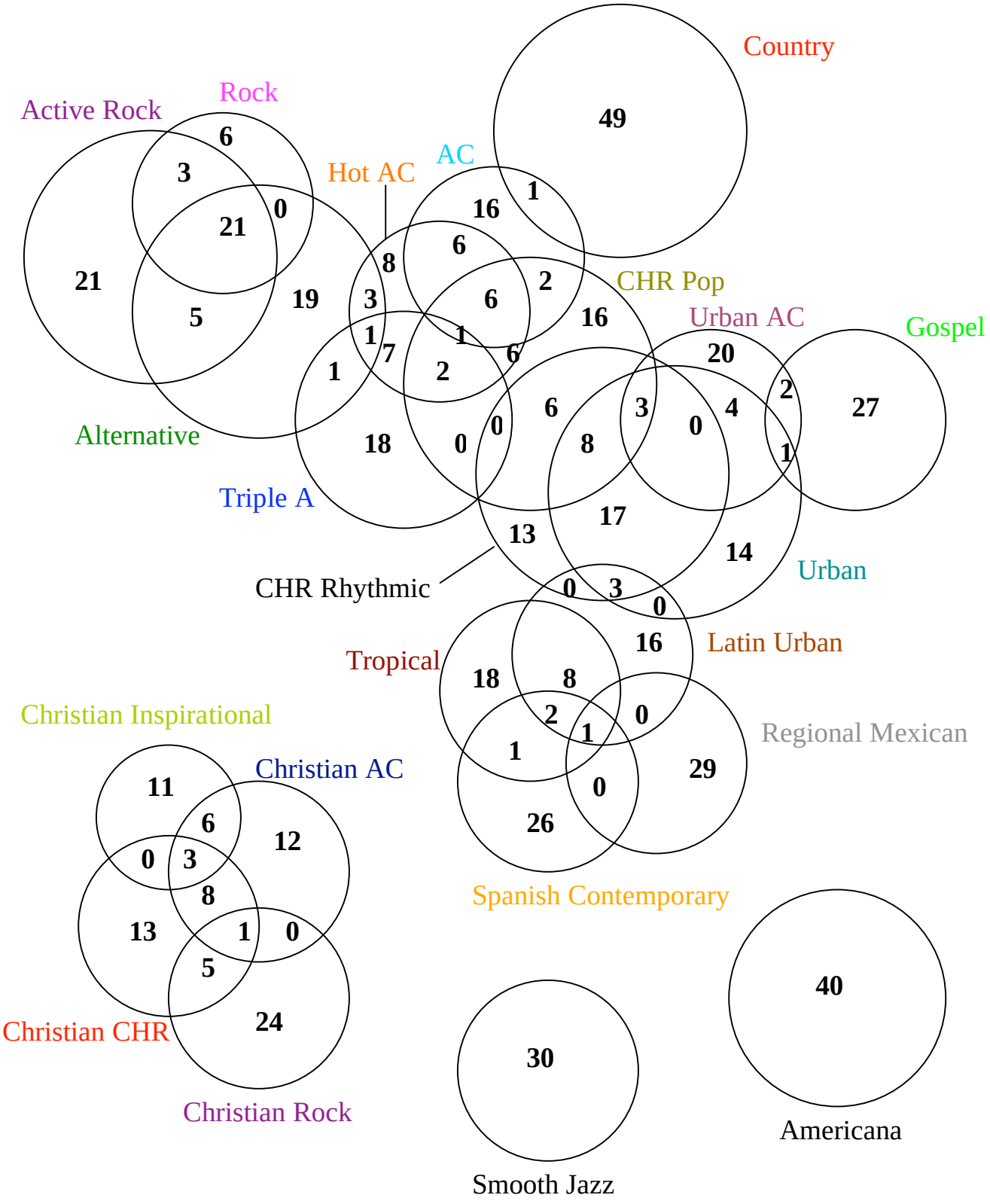
Radio and Records' charts document the most popular songs played within several formats. The formats have slightly different names than the formats from BIA Financial Networks' data, but most of the format names will be familiar by now. We collected the charts for all formats for the first week of May 2006. We then determined which songs were common to two or more formats' Radio and Records charts. Finally, we created a Venn diagram to display the overlapping relationships between the formats, based on their top twenty, thirty, forty, or fifty songs (the number varies depending on the format).

Figure 3-7 demonstrates that little has changed since we last did this exercise in our 2002 study.[18] Of the 571 songs included in the 790 available slots on all charts, 143 songs were being played on more than one format. The "rock" cluster of formats—Rock, Alternative, and Active Rock—continues to have a high degree of overlap, with 21 songs common to all three. This represents 70 percent of the top thirty songs charted for Rock.

An even larger cluster of formats, connected to the "rock" cluster, involves an amalgam of formats related to Adult Contemporary, Pop, and Urban. All but 8 songs out of the Hot Adult Contemporary's top 40 are featured in the charts of other formats. All but 13 songs out of CHR Rhythmic's top 50 were played heavily on other formats.

[18] Source data: Radio and Records, format charts for the week ending May 5, 2006, *at* various format pages on http://www.radioandrecords.com.

Figure 3-7. Overlap Between Charts of Radio and Records Formats, May 2006.



Changes (or Lack Thereof) in Overlap Over Time

The pairs with the highest degree of overlap are displayed in Table 3-5 and compared with data from Radio and Records dating back to 1994, 1998, and 2002.[19] Some overlapping pairs have grown closer, some have grown farther apart, but the overall picture remains very similar.

The phenomenon of "crossover" between formats is not new. Musical genres can involve arbitrary distinctions. And avid music listeners often enjoy music from multiple genres, perhaps mixed together. So we do not mean to argue that crossover is a bad thing. However, we are concerned that, to this point, the radio industry and the FCC have merely relied on format variety, meaning the number of formats available on the air, as an indication of increasing diversity. The Venn diagram underscores the point that, at the playlist level, real playlist diversity has not occurred.

Table 3-5. Format Pairs With the Highest Percentage Overlap, 1994-2006.

Format 1	Format 2	1994 Overlap	1998 Overlap	2002 Overlap	2006 Overlap
CHR Rhythmic	Urban	63%	58%	76%	62%
Alternative	Active Rock	n/a	48%	58%	52%
Rock	Active Rock	n/a	66%	73%	80%
CHR Pop	CHR Rhythmic	28%	32%	42%	40%
Alternative	Rock	35%	40%	60%	70%
Hot AC	CHR Pop	50%	80%	40%	43%
Hot AC	AAA	n/a	37%	50%	37%
CHR Pop	Urban	18%	10%	30%	30%
Urban	Urban AC	n/a	53%	30%	27%
AC	Hot AC	73%	27%	27%	43%

Misleading Research

Every time the FCC has had proceedings about revising its media ownership rules, the broadcasting industry has summoned its vast resources to fund a variety of quantitative studies. These studies are not peer-reviewed. The industry does not make the data underlying these studies available to the public for scrutiny. In our 2002 study, we emphasized the problems of using the industry's own data to measure the industry—especially with regard to format overlap. We find it dangerous that industry-produced research has glossed over the fact that formats with different names can have highly similar, almost identical programming.

[19] Source data for 2006: Radio and Records, format charts for the week ending May 5, 2006, *at* various format pages on http://www.radioandrecords.com. Source data for 1994, 1998, and 2002: See Peter DiCola and Kristin Thomson, *Radio Deregulation: Has It Served Citizens and Musicians?* (2002), *available at* http://www.futureofmusic.org/research/radiostudy.cfm, pp. 59-61, and the references cited therein.

For example, in economist Jerry Hausman's comments on behalf of Clear Channel, he runs a regression relating the number of formats available to the number of owners of stations in a market. He provides little discussion of the nature of his format data, except to explain why he can validly use data from two separate sources. He addresses none of the complicated issues of measuring formats, such as the distinction between primary, secondary, and tertiary formats or the issue of format overlap. Instead, he comes to the cursory conclusion that "a decrease in the number of owners in a market leads to an increase in format variety."[20]

Using format variety as one's sole measure of programming diversity, without looking at the format data in detail and from a number of perspectives (as we have tried to do here), is a mistake. Suppose you had a cabinet full of Mason jars. Every jar has a different label on the outside: grape jam, purple jam, grape preserves, grape jelly, "made last April," and so on. Do you have a wider variety of choices for what to spread on your toast just because the labels are different? Even if the substance contained in every jar is made from mixing sugar with the very same grapes from your backyard?

The same point, about Mason jar labels and grape jam, holds true for radio formats and actual programming. Increased format variety *in and of itself* does not promote the public interest. Saying that it does is like saying that it doesn't matter what's in your Mason jars, just that you have lots of ways for writing down what's in them. What the Venn diagram in Figure 3-7 shows is that policy makers cannot rely on measures that simply count formats as though they were all completely different.

No Basis for Changes in Policy

Certainly some lessons can be learned from counting up the number of formats. For instance, we learned a lot by counting the number of different formats offered by differently sized station groups. But to take an increase in the sheer number of formats offered as evidence that radio consolidation has been beneficial would be naïve.

Adding a Soft Adult Contemporary station to a market that already featured Lite Adult Contemporary, Bright Adult Contemporary, and regular old Adult Contemporary would not reflect much of an increase, if any, in programming variety or true programming diversity. Neither would adding a News/Sports/Talk station to a market that already had four News/Talk/Sports stations—possibly owned by the very same company adding the new station.

The FCC should not relax the Local Radio Ownership Rule on the basis of format-variety statistics. Instead, the Commission should find ways to collect more detailed information about what is contained within those formats—what songs were played, what syndicated programs were aired, what local news stories were covered, what new musicians were

[20] Statement of Professor Jerry A. Hausman, Comments of Clear Channel Communications, Inc., MB Docket Nos. 06-121, 02-277, 01-235, 01-317, 00-244, p. 4 ¶ 9.

showcased, and so on. Then the FCC should make such data available to the public so that the public can understand radio consolidation and the health of their public airwaves.

Overlap of Individual Stations' Playlists

This section takes the next step from measuring the overlap between format-wide charts to investigating the overlap between individual station playlists. It shows:

- Playlists for commonly owned stations in the same format can overlap up to 97% out of each station's top 30.
- For large radio companies, the average level of overlap between commonly owned stations in the same format is typically greater than 50 percent.
- Radio stations of large companies appear to draw songs from a narrow national pool.

Beyond looking at the overlap between Radio and Records' aggregated charts for several formats, we also analyzed the overlap between the top songs played by individual stations. From the Radio and Records website, we collected information on 1,617 traditional radio stations (AM and FM), plus 75 charts from individual record stores and satellite radio stations. These data represent airplay for the week from June 25, 2006 through July 1, 2006.

We found a number of examples of extreme overlap between stations in the same format with the same owner. For instance, WQRB-FM in Eau Claire and WRWD-FM in Poughkeepsie, both Country stations, had 93% of the same songs in their respective top 30 charts. These two stations are not even in the same region of the U.S. This strongly suggests that the large radio companies are using centralized programming methods rather than local program directors to choose songs.

Table 3-6 lists 32 songs.[21] The songs in bold represent the 4 songs unique to one of the two stations in question. The other 28 songs are common to the two stations. The songs are listed in descending order of frequency of airplay at WQRB-FM.

In their comments filed in the FCC's current media-ownership proceeding, Clear Channel claims the following: "Clear Channel's local managers – including approximately 250 local general managers and approximately 900 local program directors – make their own decisions about programming and community events based on extensive audience research conducted at the local level."[22] Our data from BIA Financial Networks show that WQRB-FM and WRWD-FM do have different program directors. But our data also show that Clear Channel's statement is highly misleading.

[21] Note that the data from Radio and Records only inform us about the top 30 songs played on each station, not any songs outside the top 30. Source data: Radio and Records, individual station charts for the week ending July 1, 2006, *at* various format pages on http://www.radioandrecords.com.
[22] Comments of Clear Channel Communications, Inc., MB Docket Nos. 06-121, 02-277, 01-235, 01-317, 00-244, p. 22 n. 90.

Table 3-6. Example of Extreme Playlist Overlap Between Two Commonly Owned Stations with the Same Format: Clear Channel stations WQRB-FM (Eau Claire, Wisconsin) and WRWD-FM (Poughkeepsie, New York).

Spins, WQRB FM	Rank, WQRB FM	Artist	Song	Rank, WRWD FM	Spins, WRWD FM
46	1	Kenny Chesney	Summertime	2	35
46	2	Carrie Underwood	Don't Forget To Remember Me	3	35
44	3	Wreckers	Leave The Pieces	8	28
43	4	Toby Keith	A Little Too Late	1	36
42	5	Sugarland	Down In Mississippi (Up To No Good)	25	10
42	6	Keith Anderson	Everytime I Hear Your Name	7	31
41	7	Rascal Flatts	Me And My Gang	5	33
40	8	Gary Allan	Life Ain't Always Beautiful	9	25
40	9	Trace Adkins	Swing	17	14
39	10	Steve Holy	Brand New Girlfriend	11	20
38	11	Brooks & Dunn	Building Bridges	21	11
38	12	SheDaisy	In Terms Of Love	27	8
38	13	**Matt Jenkins**	**Bad As I Want To**	---	?
38	14	Jake Owen	Yee Haw	30	5
37	15	Josh Turner	Would You Go With Me	13	19
36	16	Big & Rich	8th Of November	18	13
36	17	Little Big Town	Bring It On Home	23	10
35	18	**Tim McGraw**	**When The Stars Go Blue**	---	?
35	19	Billy Currington	Why, Why, Why	22	10
35	20	Josh Gracin	Favorite State Of Mind	16	15
35	21	Rodney Atkins	If You're Going Through Hell	6	32
33	22	Brad Paisley	The World	4	35
30	23	Eric Church	How 'Bout You	12	19
30	24	Faith Hill	Sunshine And Summertime	15	16
30	25	Darryl Worley	Nothin' But A Love Thang	29	8
28	26	Danielle Peck	Findin' A Good Man	14	16
28	27	Miranda Lambert	New Strings	19	12
26	28	Pat Green	Feels Just Like It Should	24	10
25	29	Jack Ingram	Love You	26	8
25	30	Trent Willmon	On Again Tonight	20	12
?	---	**Kenny Rogers**	**I Can't Unlove You**	10	24
?	---	**Diamond Rio**	**God Only Cries**	28	8

Since WQRB-FM and WRWD-FM have different program directors, then why do their playlists overlap by 93 percent? It could be that the program directors have total professional autonomy, and they could have picked the exact same songs. It could be that songs outside of the top 30 for each station differ more. But this level of overlap raises questions for the music community about why they overlap and whether the pool is too small.[23]

Clear Channel and other large radio companies test a specific, *national* pool of songs on focus group subjects (which could be local). Thus the choices available to program directors are limited to begin with. Then, marketing research departments create statistical models that attempt to tailor playlists to local preferences.

To illustrate what we mean by a **national pool** from which radio stations' playlists are drawn, Table 3-7 shows the owner-format combinations with the lowest ratios of unique songs to available slots.[24]

Table 3-7. National Pools of Songs for Commonly Owned Stations in the Same Format.

Owner	Format	Stations	Playlist Slots	Unique Songs	Ratio of Songs to Slots	Unique Songs per Station
Clear Channel	Country	72	2160	133	6.2%	1.8
Clear Channel	Pop	72	2151	147	6.8%	2.0
Clear Channel	AC	40	1150	123	10.7%	3.1
Citadel	Country	23	690	91	13.2%	4.0
CBS Radio	Country	17	510	86	16.9%	5.1
Citadel	Pop	17	510	92	18.0%	5.4
Radio One	Gospel	12	360	68	18.9%	5.7
Clear Channel	Hot AC	27	771	148	19.2%	5.5
Clear Channel	Urban	26	776	150	19.3%	5.8
Clear Channel	Active Rock	21	618	129	20.9%	6.1
Cumulus	Pop	9	270	63	23.3%	7.0
Radio One	Urban AC	17	510	121	23.7%	7.1

[23] A footnote to this example: Both Eau Claire and Poughkeepsie are markets in which Clear Channel took advantage of the FCC's signal-contour market definition to exceed the current local ownership cap (which uses Arbitron's market definitions). In Eau Claire, Clear Channel has 6 total stations, 5 FM and 1 AM, exceeding the FM cap of 4 stations by 1 station. In Poughkeepsie, Clear Channel has 7 stations, 5 FM and 2 AM, exceeding both the overall cap of 6 and the FM cap of 4 by 1 station. Since both markets are outside the top 100 Arbitron markets, Clear Channel's new owners plan to sell them off. But this example suggests that a relationship may exist between extreme consolidation beyond the local ownership cap and centralized programming.

[24] Source data: Radio and Records, individual station charts for the week ending July 1, 2006, *at* various format pages on http://www.radioandrecords.com.

For example, there are 133 songs that appear in the top-thirty charts of the 72 Country stations owned by Clear Channel that Radio and Records happens to survey. Thus, even if each station has its own program director, each program director would only contribute 1.8 choices to the national pool of 133 songs, on average.

Clear Channel seems to have overstated the *degree* of control enjoyed by their local program directors. Even though the number of spins for each song is different on different stations, the small pool from which songs are selected, dominated by major-label releases, is the same.

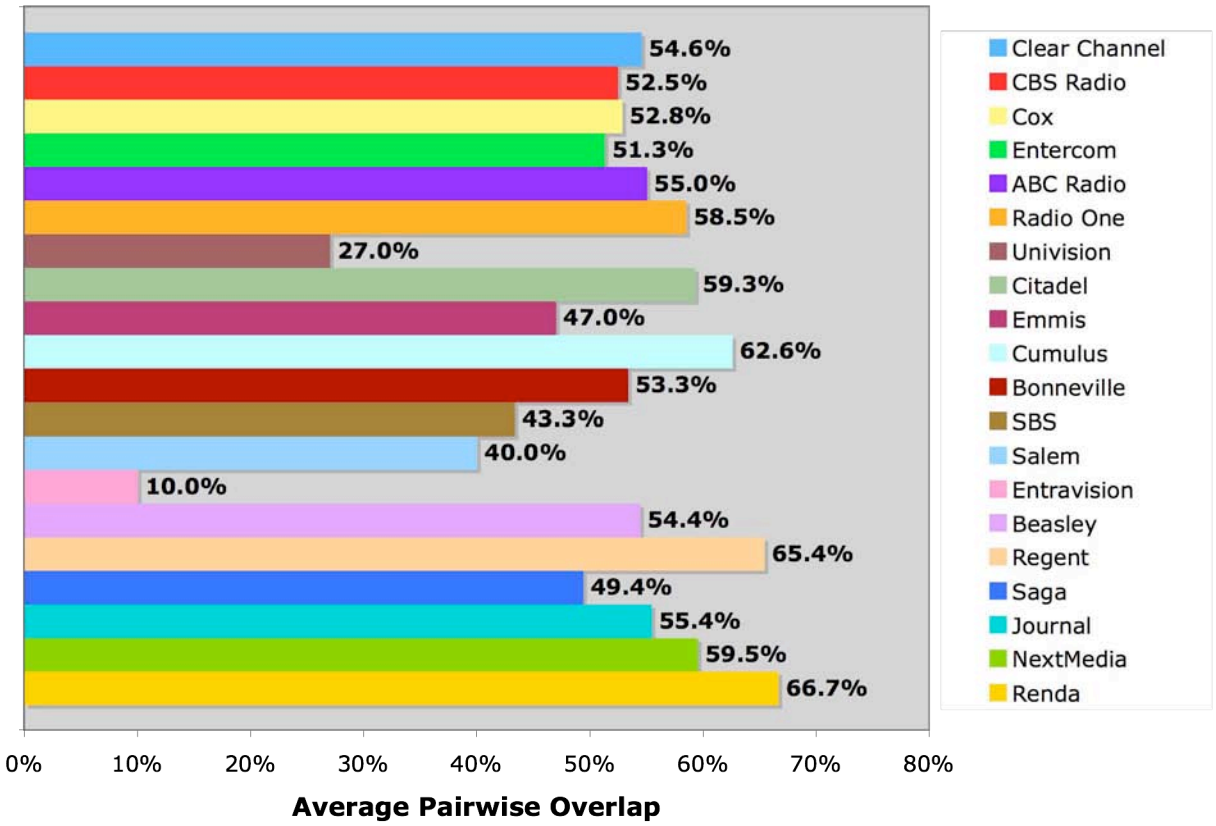
The songs on different stations in the same format are highly similar for most of the large radio companies. Figure 3-8 is a bar chart comparing the **average pairwise overlap** between stations in the same format with the same owner, weighted by the number of pairs (as opposed to giving the average overlap within each format equal weight).[25] Suppose Company X has three stations in the Pop format (stations A, B, and C) and two stations in the Hot AC format (stations D and E). There are three Company X pairs in the Pop format (A & B, B & C, and A & C) and just one pair in the Hot AC format (D & E). The average pairwise overlap is average percentage of songs that overlap across all four of those pairs: A & B, B & C, A & C, and D & E.

Remember that the figures in Figure 3-8 are averages across station pairs. Some pairs of stations, like WQRB-FM and WRWD-FM, have playlists overlapping at 93 percent or more. Fourteen percent of all station pairs with the same owner and the same format have 70 percent or more of the same songs in their playlists.[26] Other pairs of stations in the same format will have much less overlap. But the overall image is that of a restricted set of songs from which stations make their playlists.

[25] Source data: Radio and Records, individual station charts for the week ending July 1, 2006, *at* various format pages on http://www.radioandrecords.com.

[26] Specifically, 1312 out of 9194 pairs. Source data: Radio and Records, individual station charts for the week ending July 1, 2006, *at* various format pages on http://www.radioandrecords.com.

Figure 3-8. Average Pairwise Overlap Between Stations in the Same Format, By Owner, June 25-July 1, 2006.



What Figure 3-8 means is that if you take two stations in the same format with the same owner, on average those two stations' playlists will overlap by 51 percent or more, if the owner in question is one of the six largest: Clear Channel, CBS Radio (formerly Infinity), ABC Radio, Citadel, or Radio One. Once again, despite their arguments to the contrary, Clear Channel's large scale does not result in any increased diversity. Any two Clear Channel stations in the same format will overlap by 54.6 percent, regardless of where they are located geographically within the U.S.

Table 3-8 disaggregates the results, showing the average pairwise overlap for each owner-format combination.[27] The pairwise overlap provides a more tangible measure of the overlap between commonly owned stations than the unique-songs measure in Table 3-7. It focuses on the similarity of on-air programming rather than the average contribution of each program director to the national pool of songs.

[27] Source data: Radio and Records, individual station charts for the week ending July 1, 2006, *at* various format pages on http://www.radioandrecords.com.

Table 3-8. Percentage Overlap for Owners with Multiple Stations in the Same Format.

Owner	AC	AR	Alt.	CAC	Cou.	Gos.	HAC	Pop	RM	Rhy.	Rock	SJ	TrpA	UAC	UCR	Avg.
ABC Radio					62% (3)		48% (3)									**55%**
American General Media										77% (2)						**77%**
Bahakel		43% (2)														**43%**
Beasley			43% (2)		60% (4)					37% (2)					50% (2)	**54%**
Bonneville							53% (2)									**53%**
Border Media Partners									50% (2)							**50%**
Buckley Broadcasting										77% (2)						**77%**
CBS Radio	45% (8)	53% (2)	42% (11)		65% (17)		43% (14)	53% (5)		57% (9)	53% (2)	40% (5)	32% (3)	53% (2)	51% (3)	**52%**
Citadel	47% (13)	49% (5)	42% (3)		65% (23)	38% (4)	37% (3)	61% (17)		44% (4)			33% (2)	49% (8)	66% (3)	**59%**
Clear Channel	50% (40)	48% (21)	37% (18)		57% (72)	35% (11)	44% (27)	59% (72)		47% (18)	43% (16)	48% (10)	33% (6)	44% (17)	52% (26)	**55%**
Cox			67% (2)					63% (3)		52% (5)				47% (4)		**53%**
Crawford				47% (2)												**47%**
Cumulus	52% (3)	53% (3)	69% (3)		63% (5)		56% (6)	73% (9)		51% (4)	67% (2)			53% (7)	64% (3)	**63%**
Emmis			48% (3)		70% (2)					43% (4)						**47%**
Entercom	49% (6)	47% (4)	35% (4)		58% (5)		51% (6)	61% (6)		49% (3)			43% (2)	20% (2)		**51%**
Entravision									8% (3)	17% (2)						**10%**
Greater Media	60% (3)	50% (2)									60% (2)					**58%**

Owner	AC	AR	Alt.	CAC	Cou.	Gos.	HAC	Pop	RM	Rhy.	Rock	SJ	TrpA	UAC	UCR	Avg.
Hall Communications					72% (4)											**72%**
Inner City														52% (4)	57% (2)	**52%**
Journal		63% (2)			64% (3)		40% (2)	50% (2)		41% (2)						**55%**
Lincoln Financial Group					57% (2)							40% (2)				**48%**
Lotus		47% (2)							50% (3)							**49%**
Midwest Communications		10% (2)			73% (4)			63% (2)								**64%**
Millennium Radio Group	67% (2)															**67%**
Morris Communications					73% (3)						60% (2)					**70%**
Nassau								60% (2)								**60%**
New Northwest										60% (3)						**60%**
New South					62% (3)											**62%**
NextMedia	45% (4)		67% (2)		72% (3)			72% (3)		63% (2)						**60%**
Nininger					87% (2)			97% (2)								**92%**
Pamal	62% (3)							63% (2)					39% (3)			**52%**
Qantum					77% (2)			61% (3)								**65%**
Radio One			73% (2)			65% (12)		63% (2)		61% (6)		50% (2)		54% (17)	60% (13)	**59%**
Radio Training Network				39% (4)												**39%**
Regent	52% (5)	56% (4)	43% (3)		78% (7)					64% (3)						**65%**

Owner	AC	AR	Alt.	CAC	Cou.	Gos.	HAC	Pop	RM	Rhy.	Rock	SJ	TrpA	UAC	UCR	Avg.
Renda	66% (3)				70% (2)											**67%**
SBS									43% (2)							**43%**
Saga	35% (2)				70% (2)						43% (2)					**49%**
Salem				40% (12)												**40%**
Styles Media Group								47% (2)								**47%**
Triad					81% (3)			63% (2)								**77%**
URBan Radio															55% (4)	**55%**
Univision									26% (14)	57% (3)						**27%**
West Virginia Radio	39% (2)															**39%**
XM Satellite															10% (2)	**10%**

Note: The number of stations in the owner-format combination is in parentheses. The average in the last column is weighted by the number of pairs in each owner-format combination.

Key: AC = Adult Contemporary; AR = Active Rock; Alt. = Alternative; CAC = Christian Adult Contemporary; Cou. = Country, Gos. = Gospel; HAC = Hot Adult Contemporary; RM = Regional Mexican, Rhy. = Rhythmic; SJ = Smooth Jazz; TrpA = Triple A [Adult Album Alternative]; UAC = Urban Adult Contemporary; UCR = Urban Contemporary Radio.

Network Programming

This final section focuses on programming networks, showing that:

- The FCC needs to collect better data on network programming from its radio licensees.
- The three largest radio companies in terms of station ownership are also the three largest companies in terms of programming-network ownership.

We focus a great deal on station ownership in this report, and with good reason, as station ownership affects programming and reflects important political, economic, and social power. But on top of station ownership lies another layer: ownership of the programming networks that syndicate radio shows in various formats to virtually every station in the U.S.

Much of the material that radio stations broadcast today is produced by national **programming networks** and licensed as syndicated shows to hundreds of stations nationwide. This includes familiar talk show names like Rush Limbaugh, Dennis Prager, and Dr. Laura, and syndicated music programming like Jack FM and Radio Disney.

In BIA Financial Networks's database, network information is only available for 5,914 stations, while it is completely missing for 8,251 stations.[28] We decline to summarize this information here because it is so incomplete. (We can verify its incompleteness by comparing totals for certain networks, like National Public Radio, against the totals one can calculate from the BIA data.) But we bring up the issue of networks here to close on the essential public policy issue of access to data.

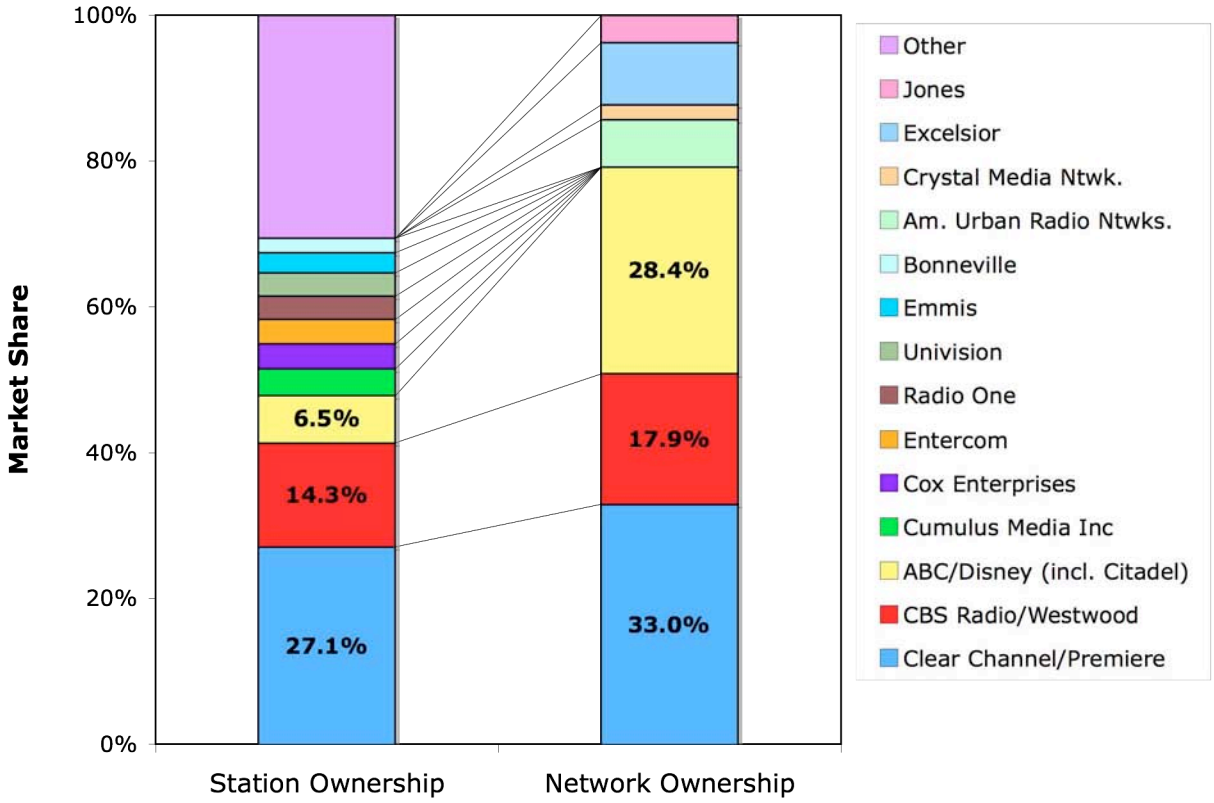
As we have stressed throughout this report, the lack of comprehensive, easily available data limits the kinds of analysis we can do. Nowhere does this constraint bite more forcefully than in measuring the pervasiveness of programming networks. We recommend: (1) that the FCC require the broadcasters themselves to provide information about what programming networks they carry during what times of day, (2) maintain a database of who owns the programming networks carried by U.S. radio stations, and (3) make these data available in a easily accessible and convenient form on the FCC website.

To make the best decisions about media policy it can, the FCC needs to demand that its licensees provide it with more specific information. We are not advocating that the FCC monitor broadcasts, just objective information about programming networks and their ownership. These data would be prohibitively expensive to collect for a single private party (that is, without industry cooperation). And such data are not available in a useable form from programming networks' websites. Because the FCC licenses stations to use the public airwaves, they have the power to require five more fields of data, or fifty. The current lack of data and lack of public education could be rectified within a year. The FCC must simply require that the licensees provide more data in a useable format.

[28] Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data.

Arbitron does conduct a survey called RADAR to measure the listenership of some of the major programming networks. We can use this less-than-ideal data to illustrate another important point about media consolidation. Figure 3-9 compares station ownership shares to the shares of network listening measured by Arbitron, which we should emphasize is an incomplete survey of all programming networks.[29]

Figure 3-9. Concentration of Station Ownership and Concentration of Network Programming.



What Figure 3-9 shows is that three of the same companies that dominate station ownership also dominate programming-network ownership. This is not a coincidence. Clear Channel, CBS Radio, and ABC/Disney (soon to merge with Citadel) all use their position in station ownership to advance their position in programming-network ownership, and vice versa.

[29] Source data: [station ownership] Media Access Pro (Radio Version), BIA Financial Networks, November 2005 data; [network listenership] The Arbitron Company, "Arbitron Releases RADAR ® 89 June 2006 Radio Network Ratings," *at* http://www.arbitron.com/national_radio/radar.htm (visited November 21, 2006).

Conclusion

This chapter has briefly described the landscape of radio programming as of late 2005 and 2006. Commercial AM and FM radio are dominated by a relatively small number of programming formats. This high concentration of formats is related to the increased concentration of local radio ownership documented in Chapter 2. The largest station groups do not offer niche formats. Rather, these formats are supplied by smaller commercial station groups and noncommercial stations. Furthermore, in our analysis of playlists, we saw tremendous overlap in programming among formats of different names and between stations in the same format with the same owner. These redundancies exist regardless of geography and local input. They undermine the FCC's goals of diversity and localism, and they show a link between centralized ownership and homogenized programming.

Measuring programming variety is made more difficult by a lack of clear, consistent, comprehensive, and publicly available data. In this chapter we have attempted to glean what insights we could about radio programming and how it serves the public interest, without imposing value judgments about what programming is good or bad. Diversity in programming means, in part, having a wide variety of programming available. We have seen that what diversity exists in traditional radio today comes from small companies and organizations, not consolidators.

The FCC should seek to collect much more and much better objective data about radio programming. The data we have, however, raise important concerns about the diversity and localism of radio programming. Thus, the FCC should not raise the local ownership caps. No sound evidence supports the notion that radio consolidation has enhanced programming diversity. Better ways to expand diversity and localism in radio are to grant more licenses to small, local entities and to expand low-power radio. While there is no easy way to measure whether radio serves the public interest, the analysis in this chapter should suggest that the changes wrought by the Telecommunications Act of 1996 have not resulted in benefits for the public in terms of radio programming.

Conclusion
Policy Recommendations

We conclude by collecting the policy recommendations we have made at various points throughout this study. We respectfully submit these recommendations to the FCC as part of its quadrennial review of its media ownership rules, including the Local Radio Ownership Rule. The Executive Summary, included at the front of the study, already provides a synopsis of what our research has uncovered about radio consolidation's history over the past three decades. Here we look forward to a more competitive, local, and diverse future for radio.

Safeguarding Competition

(1) **Maintain the current local ownership caps**; or

(2) **Institute lower caps**. Ownership caps on radio-station ownership prevent concentration of economic, social, and political power. The most commonly accepted measure of concentration, the Herfindahl-Hirschman Index (HHI), has reached a high level in the national market and dangerous levels in most local markets. We have designed a pair of methods to calculate the ownership caps necessary to keep the HHI below the threshold of danger in each local market [see Chapter 2 for details]. The FCC could justify a lower cap by using either of the methods or by combining them, applying the lower cap whenever the results of the two methods differ.

(3) **Retain the current attribution rules**. In light of the recent trend of taking media companies off the public stock market and into the holdings of private equity firms, it is essential that the FCC continue to use its 5 percent threshold to determine when a company is considered to own a radio station [see the Introduction]. Otherwise, shifting radio stations to private equity could become a loophole in the local ownership caps.

(4) **Encourage ownership by small, independent, or minority owners**. We recommend that Congress and the FCC consider several initiatives, ranging from tax incentives to requirements on sale and divestiture of stations, including the 448 reportedly to be sold by Clear Channel [see Chapter 1 for citations of precedents].

Restoring Localism

(5) **Adopt the Local Ownership Index developed by Future of Music Coalition.** Local ownership is one key aspect of the broader concept of localism. But it has the benefit of being relatively easy to quantify [see Chapter 2 for details]. From 1975 to 2005, the Local Ownership Index has declined drastically, suggesting the need for the following three policy proposals to restore local ownership.

(6) **Change the full-power licensing process.** In recent years, some non-profit entities have benefited greatly from the points system used to allocate new, noncommercial, full-power FM licenses. We applaud this previous progress, but we also point out that many of the organizations that have benefited are national [see Chapter 1]. In the future, new licenses should go to entirely local entities and should only be transferred to entirely local entities. Otherwise, the level of local control over local radio stations will remain harmed.

(7) **Use the digital audio broadcast (DAB) transition as an occasion to reallocate spectrum to entirely local entities**. The transition to DAB has been slow so far. With concentration at historically high levels and localism at historically low levels, it does not make sense to allow current licensees to enjoy two to five times the digital channels with their current spectrum allocation. Local, independent entities could make better use of that spectrum.

(8) **License more low-power FM stations**. Some states, especially on the east coast, still have fewer than five licensed low-power FM stations. Congress should heed the engineering studies commissioned by the FCC and relax the rule banning low-power FM licenses when they would use frequencies supposedly too close to those of existing full-power FM stations.

Fostering Diversity

(9) **Measure diversity more accurately**. The FCC should disregard the industry practice of using format variety—simply counting up the number of format names—as a measure of true programming diversity. Instead, the FCC should acknowledge the imperfections in the available data on formats, work to collect better data, and in the meantime use more subtle measures of format variety like the one we have used in Chapter 3.

(10) **End structural payola.** The practice of accepting funds from "independent promoters" in return for airplay—alongside more crude forms of payola involving gifts to radio employees—represents a structural problem with how radio playlists have been developed. The FCC should enforce the prohibition on payola by requiring broadcasters to provide data on both playlists and on consumer-testing pools of songs and monitor that data to verify a level playing field for musicians on music radio.

(11) **Apply the competition, localism, and diversity goals to the DAB spectrum**. The diversity requirement is especially important to DAB if the spectrum reallocation we recommend does not occur. In this case, current licensees will enjoy up to five times the spectrum. The FCC should expect five times the diversity from its licensees—not just rehashing of the same narrow playlists and syndication choices.

Improving Access to Data

(12**) Collect more ownership-related information from licensees**. The public should have much better basic information about radio licensees: such as their owner; their parent company; their headquarters and main centers of employment; and their local marketing agreements (LMAs), if any.

(13) **Begin collecting objective data on programming**. We emphasize the term "objective" because we believe that creating access to the simplest objective information about programming would be a major step forward. We do not expect the FCC to begin analyzing or classifying content—that step can be left to the public, but only if it has the raw, objective data. We would include such objective and easily verifiable information such as what networks each station carries, what popular syndicated shows each station carries, what playlists music stations are using, and so on.

(14) **Make all information on radio easily available to the public on the FCC website**. Citizens should not have to purchase a $7,000 commercial database to understand who owns which radio stations, where those owners are located, and what those owners are putting on the air.

(15) **Keep increasing public access and public involvement.** The FCC should have responsibility for cataloguing the public comments made in its proceedings. It should also continue the current policy of holding more public hearings when the media-ownership rules are reviewed. We have been encouraged by the FCC's efforts on this front and we urge the FCC to maintain its trajectory towards more open and transparent decision-making.

Radio has great importance for our culture, our economy, and our democracy. The public deserves to see it repaired. These proposals aim to take the research findings from this quantitative history of radio consolidation, alongside the past assumptions of radio policy that did not hold true, and apply those lessons to radio today. The proposals also acknowledge the role of new technologies, including those applying directly to the traditional radio spectrum. Radio has a future in a media environment among new technologies. If Congress, the FCC, and the policy community worked together to implement these fifteen proposals, we believe that the unfortunate state of traditional radio would improve, to the benefit of all.

Appendix A: Population and LCS of Arbitron Markets, Organized by Market Group.

Market Group #1

Market	Population	LCS (%)	Market	Population	LCS (%)
New York, NY	18,213,900	78.0	Houston-Galveston, TX	5,081,100	81.6
Los Angeles, CA	13,006,500	88.0	Washington, DC	4,899,500	75.8
Chicago, IL	9,259,400	86.6	Detroit, MI	4,647,500	85.1
San Francisco, CA	6,935,800	70.7	Boston, MA	4,559,700	77.1
Dallas-Ft. Worth, TX	5,664,300	90.1	Atlanta, GA	4,556,400	86.2
Philadelphia, PA	5,121,000	80.5	Miami-Ft. Lauderdale-Hollywood, FL	4,114,600	85.6

Market Group #2

Market	Population	LCS (%)	Market	Population	LCS (%)
Seattle-Tacoma, WA	3,721,300	84.3	Denver-Boulder, CO	2,548,500	83.2
Phoenix, AZ	3,449,500	82.6	Pittsburgh, PA	2,341,300	85.4
Minneapolis-St. Paul, MN	3,096,300	76.0	Portland, OR	2,304,700	81.7
San Diego, CA	2,972,200	77.0	Cleveland, OH	2,145,900	81.0
St. Louis, MO	2,655,000	87.7	Cincinnati, OH	2,028,400	80.9
Baltimore, MD	2,628,700	68.4	Sacramento, CA	2,020,600	78.1
Tampa-St. Petersburg-Clearwater, FL	2,563,400	83.8			

Market Group #3

Market	Population	LCS (%)	Market	Population	LCS (%)
Salt Lake City-Ogden-Provo, UT	1,853,300	86.2	Nashville, TN	1,298,200	84.6
Kansas City, MO-KS	1,844,400	84.9	New Orleans, LA	1,291,500	85.7
San Antonio, TX	1,832,500	85.4	Memphis, TN	1,263,700	83.6
Milwaukee-Racine, WI	1,709,300	84.4	West Palm Beach-Boca Raton, FL	1,231,400	61.1
Columbus, OH	1,654,500	86.4	Jacksonville, FL	1,221,800	80.2
Charlotte-Gastonia-Rock Hill, NC-SC	1,640,200	76.2	Hartford-New Britain-Middletown, CT	1,209,200	70.4
Providence-Warwick-Pawtucket, RI	1,630,100	58.4	Buffalo-Niagara Falls, NY	1,156,600	84.5
Las Vegas, NV	1,623,900	87.6	Oklahoma City, OK	1,127,700	83.7
Orlando, FL	1,602,000	81.7	Rochester, NY	1,104,000	76.3
Norfolk-Virginia Beach-Newport News, VA	1,560,300	83.4	Louisville, KY	1,087,500	85.8
Indianapolis, IN	1,559,000	86.5	Richmond, VA	1,041,000	82.2
Austin, TX	1,413,700	73.6	Birmingham, AL	1,015,500	87.8
Raleigh-Durham, NC	1,317,500	70.6	McAllen-Brownsville-Harlingen, TX	1,008,200	79.6
Greensboro-Winston Salem-High Point, NC	1,306,200	70.7			

Market Group #4

Market	Population	LCS (%)	Market	Population	LCS (%)
Dayton, OH	987,800	76.7	Omaha-Council Bluffs, NE-IA	722,900	80.1
Greenville-Spartanburg, SC	951,100	76.9	Knoxville, TN	717,400	80.1
Tucson, AZ	913,500	81.1	El Paso, TX	710,200	86.7
Honolulu, HI	911,300	90.8	Monterey-Salinas-Santa Cruz, CA	672,900	68.0
Albany-Schenectady-Troy, NY	890,600	84.8	Syracuse, NY	654,600	77.1
Tulsa, OK	873,300	86.8	Harrisburg-Lebanon-Carlisle, PA	641,600	65.5
Fresno, CA	853,700	78.5	Bakersfield, CA	638,000	79.8
Grand Rapids, MI	846,000	76.4	Baton Rouge, LA	624,600	75.9
Ft. Myers-Naples-Marco Island, FL	800,700	84.8	Toledo, OH	617,600	73.7
Allentown-Bethlehem, PA	771,000	61.5	Springfield, MA	614,300	57.0
Wilkes Barre-Scranton, PA	769,100	72.1	Little Rock, AR	604,600	80.4
Albuquerque, NM	758,500	85.2			

Market Group #5

Market	Population	LCS (%)	Market	Population	LCS (%)
Greenville-New Bern-Jacksonville, NC	587,800	73.3	Huntsville, AL	474,200	76.4
Charleston, SC	573,900	85.6	Santa Rosa, CA	472,400	45.0
Gainesville-Ocala, FL	566,600	67.0	Youngstown-Warren, OH	472,200	76.0
Des Moines, IA	564,400	82.4	Roanoke-Lynchburg, VA	469,000	79.0
Columbia, SC	563,400	84.0	Lansing-East Lansing, MI	457,200	68.0
Wichita, KS	563,200	86.6	Jackson, MS	454,900	83.0
Mobile, AL	552,900	74.7	Flint, MI	444,700	59.2
Colorado Springs, CO	552,800	79.2	Reno, NV	434,800	89.6
Spokane, WA	552,100	84.6	Pensacola, FL	434,400	54.8
Madison, WI	529,300	71.9	Fayetteville, NC	430,400	74.0
Lafayette, LA	522,800	81.6	Saginaw-Bay City-Midland, MI	404,000	75.4
Johnson City-Kingsport-Bristol, TN-VA	516,000	75.0	Shreveport, LA	395,000	86.0
Ft. Wayne, IN	514,700	80.7	Corpus Christi, TX	386,000	80.8
Modesto, CA	497,700	62.0	Beaumont-Port Arthur, TX	384,700	69.7
Lexington-Fayette, KY	497,600	76.1	Appleton-Oshkosh, WI	372,900	62.5
Augusta, GA	489,600	82.2	Biloxi-Gulfport-Pascagoula, MS	372,200	71.2
Boise, ID	489,200	81.1	Atlantic City-Cape May, NJ	365,500	73.8
Chattanooga, TN	487,300	84.0	Burlington-Plattsburgh, VT-NY	363,200	77.6
Oxnard-Ventura, CA	479,200	51.6	Quad Cities, IA-IL	357,900	77.2

Market Group #6

Market	Population	LCS (%)	Market	Population	LCS (%)
Tyler-Longview, TX	349,900	73.1	Wausau-Stevens Point, WI	271,500	72.7
Fayetteville, AR	346,900	78.1	South Bend, IN	268,700	81.5
Peoria, IL	346,200	77.8	Ft. Smith, AR	264,300	73.3
Springfield, MO	342,000	82.9	Morgantown-Clarksburg-Fairmont, WV	254,700	73.9
Montgomery, AL	341,400	81.8	Binghamton, NY	251,700	78.3
Palm Springs, CA	339,400	87.8	Wilmington, NC	251,500	72.0
Salisbury-Ocean City, MD	332,500	79.1	Lubbock, TX	250,800	84.1
Macon, GA	326,700	83.1	Columbus, GA	250,200	85.8
Huntington-Ashland, WV-KY	313,000	81.0	Charleston, WV	247,400	84.9
Savannah, GA	304,500	70.0	Odessa-Midland, TX	241,100	84.8
Evansville, IN	299,100	83.8	Yakima, WA	227,300	74.7
Utica-Rome, NY	297,600	75.3	Amarillo, TX	226,800	72.6
Erie, PA	280,200	79.4	Traverse City-Petoskey, MI	223,600	80.0
Anchorage, AK	274,500	81.9	Richland-Kennewick-Pasco, WA	210,800	71.4
Myrtle Beach, SC	272,900	71.7	Terre Haute, IN	205,300	71.6
Portland, ME	272,700	80.5	Duluth-Superior, MN-WI	200,000	75.5

Market Group #7

Market	Population	LCS (%)	Market	Population	LCS (%)
Eugene-Springfield, OR	331,900	69.9	Tupelo, MS	237,800	69.3
Rockford, IL	331,800	56.0	Green Bay, WI	236,100	50.2
Flagstaff-Prescott, AZ	315,100	64.4	Cape Cod, MA	231,900	65.9
Poughkeepsie, NY	292,400	49.0	Johnstown, PA	228,400	60.4
Asheville, NC	290,000	50.0	Topeka, KS	226,200	69.4
Tallahassee, FL	277,200	65.9	Dothan, AL	225,800	69.6
Hagerstown-Chambersburg-Waynesboro, MD-PA	269,200	53.6	Waco, TX	220,800	59.3
New London, CT	265,600	54.7	Laredo, TX	217,900	68.7
Lincoln, NE	263,600	66.1	Chico, CA	212,000	59.3
San Luis Obispo, CA	256,900	61.7	Santa Barbara, CA	207,700	57.4
Kalamazoo, MI	243,600	52.6	Muncie-Marion, IN	202,800	52.9
Lebanon-Rutland-White River Junction, NH-VT	241,500	56.8			

Market Group #8

Market	Population	LCS (%)	Market	Population	LCS (%)
Florence, SC	197,000	75.5	Columbia, MO	142,600	76.5
Medford-Ashland, OR	191,800	71.7	Wichita Falls, TX	140,300	71.6
Alexandria, LA	187,900	72.6	Billings, MT	134,400	82.2
Bangor, ME	186,000	70.6	Texarkana, TX-AR	132,600	74.4
Lake Charles, LA	183,900	81.6	Altoona, PA	126,900	78.8
Laurel-Hattiesburg, MS	181,900	72.8	Grand Junction, CO	125,000	73.3
Fargo-Moorhead, ND-MN	179,500	77.5	Albany, GA	124,400	87.9
La Crosse, WI	179,500	75.5	Sioux City, IA	123,600	84.1
Redding, CA	175,600	75.2	Williamsport, PA	118,500	86.1
Bend, OR	174,800	80.4	Rapid City, SD	117,200	87.6
Marion-Carbondale, IL	161,000	72.0	Harrisonburg, VA	112,300	83.1
Bryan-College Station, TX	160,900	73.4	Watertown, NY	105,100	75.6
Abilene, TX	159,900	81.0	San Angelo, TX	103,600	78.0
Panama City, FL	155,300	84.8	Bismarck, ND	98,200	90.9
Lima, OH	153,900	71.7	Grand Forks, ND-MN	95,500	73.6
Eau Claire, WI	152,800	82.7	Jackson, TN	94,300	82.8
Waterloo-Cedar Falls, IA	150,300	70.3	Great Falls, MT	79,500	82.8
Parkersburg-Marietta, WV-OH	149,500	80.3	Meridian, MS	77,500	79.3
Wheeling, WV	149,400	79.6	Casper, WY	67,800	85.5
Monroe, LA	148,400	82.6			

Market Group #9

Market	Population	LCS (%)	Market	Population	LCS (%)
Santa Maria-Lompoc, CA	199,600	46.7	Meadville-Franklin, PA	145,900	61.1
Cedar Rapids, IA	197,300	68.9	Florence-Muscle Shoals, AL	141,300	62.2
Olean, NY	195,400	48.5	State College, PA	140,700	55.3
Bowling Green, KY	194,300	64.8	Columbus-Starkville-West Point, MS	125,100	62.0
Sunbury-Selinsgrove-Lewsiburg, PA	191,000	48.7	Montpelier-Barre-St Johnsbury, VT	123,100	47.2
Elmira-Corning, NY	189,600	65.4	Valdosta, GA	122,600	65.0
Champaign, IL	185,400	60.0	Elkins-Buckhannon-Weston, WV	116,100	65.1
St. Cloud, MN	184,800	64.4	Mankato-New Ulm-St Peter, MN	114,600	63.4
Ft. Walton Beach, FL	181,500	63.5	Lawton, OK	113,200	59.4
Winchester, VA	175,300	45.9	Decatur, IL	109,800	66.4
Rochester, MN	174,200	60.1	Bluefield, WV	105,600	50.6
Charlottesville, VA	168,400	59.4	Ithaca, NY	100,900	47.7
Tuscaloosa, AL	167,900	52.3	Cookeville, TN	97,400	63.1
Joplin, MO	162,400	59.8	Sebring, FL	91,200	47.7
Dubuque, IA	161,900	68.7	Jonesboro, AR	85,600	68.4
Pittsburg, KS	159,800	51.5	Cheyenne, WY	83,700	54.0
Bloomington, IL	157,400	56.3	Beckley, WV	79,700	67.7
Lafayette, IN	154,400	68.4	Mason City, IA	79,500	64.2
LaSalle-Peru, IL	153,300	57.7	Brunswick, GA	69,900	45.1
Elizabeth City-Nags Head, NC	147,500	49.8			

Market Group #10

Market	Population	LCS (%)	Market	Population	LCS (%)
Ann Arbor, MI	341,700	15.3	Muskegon, MI	172,500	43.6
Killeen-Temple, TX	327,800	36.0	New River Valley, VA	168,100	16.2
Fredericksburg, VA	314,200	36.8	Santa Fe, NM	157,800	12.5
New Bedford-Fall River, MA	264,100	20.0	Sussex, NJ	151,500	29.7
Concord, NH	257,600	37.1	Pueblo, CO	149,500	21.6
Merced, CA	249,000	44.7	Battle Creek, MI	138,500	21.1
Manchester, NH	235,100	42.3	Hamptons-Riverhead, NY	136,200	32.6
Danbury, CT	223,100	30.6	Augusta-Waterville, ME	119,400	38.6
Rocky Mount-Wilson, NC	220,800	0.0	Sheboygan, WI	113,400	37.2
Frederick, MD	218,500	38.6	Lewiston-Auburn, ME	106,100	6.6
Clarksville-Hopkinsville, TN-KY	211,300	32.4	The Florida Keys, FL	80,900	0.0
Hilton Head, SC	186,200	31.0			

Market Group #11

Market	Population	LCS (%)	Market	Population	LCS (%)
Akron, OH	703,000	29.3	Morristown, NJ	484,000	10.7
Wilmington, DE	679,400	35.6	Portsmouth-Dover-Rochester, NH	473,300	39.4
Sarasota-Bradenton, FL	641,400	25.3	Ft. Pierce-Stuart-Vero Beach, FL	472,000	43.4
Stockton, CA	635,600	31.7	Bridgeport, CT	467,800	23.6
Daytona Beach, FL	535,600	22.2	Ft. Collins-Greeley, CO	428,300	33.3
Visalia-Tulare-Hanford, CA	528,200	29.3	Victor Valley, CA	419,300	33.4
Lakeland-Winter Haven, FL	514,000	25.3	Canton, OH	406,900	38.2
Melbourne-Titusville-Cocoa, FL	509,700	35.8	Reading, PA	388,600	28.9
York, PA	491,700	38.3	Newburgh-Middletown, NY	367,000	18.2
New Haven, CT	490,700	26.0	Trenton, NJ	364,500	19.9
Worcester, MA	488,000	31.7	Stamford-Norwalk, CT	364,200	16.3
Lancaster, PA	484,700	33.9			

Market Group #12

Market	Population	LCS (%)	Market	Population	LCS (%)
Nassau-Suffolk, NY	2,830,700	26.0	Middlesex-Somerset-Union, NJ	1,642,000	7.0
Riverside-San Bernardino, CA	2,001,200	36.7	Monmouth-Ocean, NJ	1,192,600	27.5
San Jose, CA	1,699,100	21.8			

Appendix B: Local Markets in Which at Least One Owner Exceeds the Local Ownership Cap and Is Grandfathered In, Fall 2005.

Market Group	Local Market	Owner	Number of Stations	Type of Cap	Numeric Cap
1	Chicago, IL	NextMedia Group	11	Overall	8
	Chicago, IL	NextMedia Group	8	FM	5
	Los Angeles, CA	Clear Channel Comm.	10	Overall	8
	Los Angeles, CA	Clear Channel Comm.	6	FM	5
	Los Angeles, CA	Multicultural Radio Bcstg.	6	AM	5
	San Francisco, CA	Clear Channel Comm.	6	FM	5
2	Cleveland, OH	Clear Channel Comm.	5	FM	4
	San Diego, CA	Clear Channel Comm.	5	FM	4
	Tampa-St. Petersburg-Clearwater, FL	Cox Radio Inc	6	FM	5
3	Austin, TX	Clear Channel Comm.	5	FM	4
	Austin, TX	Emmis Comm.	5	FM	4
	Buffalo-Niagara Falls, NY	Entercom	7	Overall	6
	Jacksonville, FL	Clear Channel Comm.	6	FM	5
	Kansas City, MO-KS	Entercom	9	Overall	7
	Kansas City, MO-KS	Entercom	5	FM	4
	Louisville, KY	Clear Channel Comm.	10	Overall	7
	Louisville, KY	Clear Channel Comm.	6	FM	4
	Louisville, KY	Radio One Inc	6	FM	4
	McAllen-Brownsville-Harlingen, TX	Border Media Partners LLC	7	Overall	6
	New Orleans, LA	Clear Channel Comm.	5	FM	4
	Oklahoma City, OK	Citadel Bcstg. Corp	5	FM	4
	Orlando, FL	Clear Channel Comm.	5	FM	4
	Orlando, FL	Cox Radio Inc	5	FM	4
	Raleigh-Durham, NC	Curtis Media Group	10	Overall	7
	Raleigh-Durham, NC	Curtis Media Group	5	FM	4
	Raleigh-Durham, NC	Curtis Media Group	5	AM	4
	West Palm Beach-Boca Raton, FL	Clear Channel Comm.	5	FM	4
	West Palm Beach-Boca Raton, FL	Infinity Bcstg.	5	FM	4
4	Albany-Schenectady-Troy, NY	Pamal Bcstg. Ltd	10	Overall	8
	Albany-Schenectady-Troy, NY	Pamal Bcstg. Ltd	8	FM	5
	Albuquerque, NM	Citadel Bcstg. Corp	8	Overall	7
	Albuquerque, NM	American General Media	5	FM	4
	Albuquerque, NM	Citadel Bcstg. Corp	5	FM	4
	Albuquerque, NM	Clear Channel Comm.	6	FM	4
	Albuquerque, NM	Univision Comm. Inc	5	FM	4
	Bakersfield, CA	Clear Channel Comm.	5	FM	4
	Baton Rouge, LA	Guaranty Bcstg. Company	5	FM	4
	Dayton, OH	Clear Channel Comm.	8	Overall	7
	Dayton, OH	Clear Channel Comm.	6	FM	4
	Fresno, CA	Clear Channel Comm.	6	FM	5
	Grand Rapids, MI	Clear Channel Comm.	5	FM	4

Market Group	Local Market	Owner	Number of Stations	Type of Cap	Numeric Cap
4 (cont.)	Greenville-Spartanburg, SC	Entercom	5	FM	4
	Knoxville, TN	Horne Radio LLC	5	AM	4
	Little Rock, AR	Citadel Bcstg. Corp	10	Overall	7
	Little Rock, AR	Citadel Bcstg. Corp	7	FM	4
	Little Rock, AR	Clear Channel Comm.	5	FM	4
	Omaha-Council Bluffs, NE-IA	Waitt Radio	8	Overall	7
	Omaha-Council Bluffs, NE-IA	Journal Comm. Inc	5	FM	4
	Syracuse, NY	Galaxy Comm.	9	Overall	7
	Syracuse, NY	Clear Channel Comm.	5	FM	4
	Syracuse, NY	Galaxy Comm.	6	FM	4
	Toledo, OH	Cumulus Bcstg. Inc	8	Overall	7
	Toledo, OH	Cumulus Bcstg. Inc	6	FM	4
	Wilkes Barre-Scranton, PA	Entercom	9	Overall	8
	Wilkes Barre-Scranton, PA	Entercom	6	FM	5
5	Atlantic City-Cape May, NJ	Equity Comm. LP	9	Overall	7
	Atlantic City-Cape May, NJ	Equity Comm. LP	7	FM	4
	Augusta, GA	Beasley Broadcast Group	9	Overall	7
	Augusta, GA	Beasley Broadcast Group	6	FM	4
	Augusta, GA	Clear Channel Comm.	5	FM	4
	Charleston, SC	Citadel Bcstg. Corp	5	FM	4
	Charleston, SC	Clear Channel Comm.	5	FM	4
	Chattanooga, TN	Clear Channel Comm.	5	FM	4
	Columbia, SC	Inner City Bcstg. Corp.	5	FM	4
	Ft. Wayne, IN	Summit City Radio Group	5	FM	4
	Gainesville-Ocala, FL	Jablamo LLC	9	Overall	7
	Gainesville-Ocala, FL	Asterisk Comm. Inc.	5	FM	4
	Gainesville-Ocala, FL	Jablamo LLC	5	FM	4
	Greenville-New Bern-Jacksonville, NC	NextMedia Group	6	FM	5
	Lafayette, LA	Regent Comm., Inc	5	FM	4
	Lexington-Fayette, KY	Clear Channel Comm.	5	FM	4
	Madison, WI	Mid-West Fam. Bcst. Gp.	8	Overall	7
	Madison, WI	Mid-West Fam. Bcst. Gp.	5	FM	4
	Roanoke-Lynchburg, VA	Clear Channel Comm.	9	Overall	7
	Roanoke-Lynchburg, VA	Clear Channel Comm.	7	FM	4
	Saginaw-Bay City-Midland, MI	Citadel Bcstg. Corp	5	FM	4
	Shreveport, LA	Access.1 Comm.	5	FM	4
	Wichita, KS	Journal Comm. Inc	5	FM	4
	Youngstown-Warren, OH	Cumulus Bcstg. Inc	8	Overall	6
	Youngstown-Warren, OH	Cumulus Bcstg. Inc	5	FM	4
6	Charleston, WV	West Virginia Radio	7	Overall	6
	Columbus, GA	Clear Channel Comm.	8	Overall	6
	Columbus, GA	Clear Channel Comm.	5	FM	4
	Duluth-Superior, MN-WI	Red Rock Radio Corp	5	FM	4
	Evansville, IN	Regent Comm., Inc	5	FM	4
	Fayetteville, AR	Cumulus Bcstg. Inc	7	Overall	6
	Fayetteville, AR	Cumulus Bcstg. Inc	5	FM	4
	Huntington-Ashland, WV-KY	Clear Channel Comm.	9	Overall	6
	Huntington-Ashland, WV-KY	Clear Channel Comm.	5	FM	4

Market Group	Local Market	Owner	Number of Stations	Type of Cap	Numeric Cap
6 (cont.)	Macon, GA	Cumulus Bcstg. Inc	8	Overall	7
	Macon, GA	Clear Channel Comm.	5	FM	4
	Macon, GA	Cumulus Bcstg. Inc	5	FM	4
	Montgomery, AL	Cumulus Bcstg. Inc	7	Overall	6
	Myrtle Beach, SC	Cumulus Bcstg. Inc	7	Overall	6
	Myrtle Beach, SC	Cumulus Bcstg. Inc	6	FM	4
	Palm Springs, CA	MCC Radio LLC	7	Overall	6
	Peoria, IL	AAA Entertainment	5	FM	4
	Peoria, IL	Regent Comm., Inc	5	FM	4
	Portland, ME	Citadel Bcstg. Corp	6	FM	4
	Portland, ME	Nassau Bcstg. Partners LP	5	FM	4
	Salisbury-Ocean City, MD	Clear Channel Comm.	8	Overall	7
	Salisbury-Ocean City, MD	Delmarva Bcstg. Company	8	Overall	7
	Salisbury-Ocean City, MD	Great Scott Bcstg. Inc	10	Overall	7
	Salisbury-Ocean City, MD	Clear Channel Comm.	6	FM	4
	Salisbury-Ocean City, MD	Delmarva Bcstg. Company	6	FM	4
	Salisbury-Ocean City, MD	Great Scott Bcstg. Inc	8	FM	4
	Savannah, GA	Cumulus Bcstg. Inc	7	Overall	6
	Savannah, GA	Cumulus Bcstg. Inc	5	FM	4
	Traverse City-Petoskey, MI	Midwestern Bcstg. Co.	5	FM	4
	Traverse City-Petoskey, MI	Northern Broadcast Inc	6	FM	4
	Traverse City-Petoskey, MI	Northern Star Bcstg. LLC	5	FM	4
	Utica-Rome, NY	Clear Channel Comm.	9	Overall	7
	Utica-Rome, NY	Clear Channel Comm.	5	FM	4
	Wilmington, NC	NextMedia Group	5	FM	4
	Wilmington, NC	Sea-Comm Inc	5	FM	4
7	Chico, CA	Results Radio LLC	5	FM	4
	Green Bay, WI	Cumulus Bcstg. Inc	5	FM	4
	Lebanon-Rutland-White River Junction, NH-VT	Clear Channel Comm.	10	Overall	7
	Lebanon-Rutland-White River Junction, NH-VT	Nassau Bcstg. Partners LP	8	Overall	7
	Lebanon-Rutland-White River Junction, NH-VT	Clear Channel Comm.	7	FM	4
	Lebanon-Rutland-White River Junction, NH-VT	Nassau Bcstg. Partners LP	6	FM	4
	Poughkeepsie, NY	Clear Channel Comm.	7	Overall	6
	Poughkeepsie, NY	Clear Channel Comm.	5	FM	4
	Santa Barbara, CA	Clear Channel Comm.	7	Overall	6
	Waco, TX	Clear Channel Comm.	4	FM	3
8	Albany, GA	Cumulus Bcstg. Inc	8	Overall	6
	Albany, GA	Cumulus Bcstg. Inc	6	FM	4
	Altoona, PA	Forever Bcstg. Inc.	6	Overall	5
	Altoona, PA	Forever Bcstg. Inc.	4	FM	3
	Bangor, ME	Clear Channel Comm.	7	Overall	6
	Bangor, ME	Clear Channel Comm.	6	FM	4
	Bismarck, ND	Clear Channel Comm.	6	Overall	5
	Eau Claire, WI	Clear Channel Comm.	5	FM	4

Market Group	Local Market	Owner	Number of Stations	Type of Cap	Numeric Cap
8 (cont.)	Fargo-Moorhead, ND-MN	Clear Channel Comm.	7	Overall	6
	Fargo-Moorhead, ND-MN	Clear Channel Comm.	5	FM	4
	Florence, SC	Cumulus Bcstg. Inc	8	Overall	6
	Florence, SC	Qantum Comm. Corp	7	Overall	6
	Florence, SC	Cumulus Bcstg. Inc	6	FM	4
	Florence, SC	Qantum Comm. Corp	5	FM	4
	Laurel-Hattiesburg, MS	Clear Channel Comm.	7	Overall	6
	Laurel-Hattiesburg, MS	Clear Channel Comm.	5	FM	4
	Lima, OH	Clear Channel Comm.	5	FM	4
	Panama City, FL	Clear Channel Comm.	5	FM	4
	Redding, CA	Results Radio LLC	5	FM	4
	Watertown, NY	Clancy-Mance Comm. N.	5	FM	4
	Wichita Falls, TX	Cumulus Bcstg. Inc	4	FM	3
9	Beckley, WV	Southern Comm. Corp	6	Overall	5
	Beckley, WV	Southern Comm. Corp	4	FM	3
	Bloomington, IL	AAA Entertainment	4	FM	3
	Bluefield, WV	Triad Bcstg. Company	9	Overall	6
	Bluefield, WV	Triad Bcstg. Company	5	FM	4
	Brunswick, GA	Qantum Comm. Corp	6	Overall	5
	Brunswick, GA	Qantum Comm. Corp	4	FM	3
	Columbus-Starkville-West Point, MS	Cumulus Bcstg. Inc	7	Overall	6
	Decatur, IL	Cromwell Group Inc, The	4	FM	3
	Elizabeth City-Nags Head, NC	East Carolina Radio Inc.	8	Overall	6
	Elizabeth City-Nags Head, NC	East Carolina Radio Inc.	5	FM	4
	LaSalle-Peru, IL	Mendota Bcstg. Inc.	5	FM	4
	Meadville-Franklin, PA	Forever Bcstg. Inc.	10	Overall	6
	Meadville-Franklin, PA	Forever Bcstg. Inc.	6	FM	4
	Sebring, FL	Cohan Radio Group Inc.	5	Overall	3
	Valdosta, GA	Black Crow Media Group	5	FM	4
10	Battle Creek, MI	Clear Channel Comm.	4	Overall	3
	Clarksville-Hopkinsville, TN-KY	Saga Comm. Inc	6	Overall	5
	Clarksville-Hopkinsville, TN-KY	Saga Comm. Inc	4	FM	3
	Concord, NH	Nassau Bcstg. Partners LP	8	Overall	6
	Concord, NH	Nassau Bcstg. Partners LP	7	FM	4
	Hilton Head, SC	Triad Bcstg. Company	4	FM	3
	Killeen-Temple, TX	Cumulus Bcstg. Inc	4	FM	3
	Sussex, NJ	Clear Channel Comm.	4	Overall	2
	Sussex, NJ	Clear Channel Comm.	3	FM	2
	The Florida Keys, FL	Clear Channel Comm.	6	FM	4
11	Portsmouth-Dover-Rochester, NH	Clear Channel Comm.	7	Overall	6
	Sarasota-Bradenton, FL	Clear Channel Comm.	7	Overall	6
	Sarasota-Bradenton, FL	Clear Channel Comm.	5	FM	4
	Victor Valley, CA	KHWY Inc	8	Overall	7
	Victor Valley, CA	KHWY Inc	8	FM	4

Appendix C: Ratings-Based HHI, Four-Firm Concentration Ratio, and Two-Firm Concentration Ratios for each Local Market, Fall 2005, Organized by Market Group.

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
1	Atlanta, GA	1487	69.1	42.1
	Boston, MA	1660	79.0	45.3
	Chicago, IL	1506	66.2	48.3
	Dallas-Ft. Worth, TX	1172	59.0	33.1
	Detroit, MI	1975	81.3	55.7
	Houston-Galveston, TX	1765	75.3	46.9
	Los Angeles, CA	1274	61.8	42.3
	Miami-Ft. Lauderdale-Hollywood, FL	1546	69.8	41.3
	New York, NY	1491	69.5	46.3
	Philadelphia, PA	1745	75.1	50.2
	San Francisco, CA	1451	66.4	42.6
	Washington, DC	1730	75.5	45.5
2	Baltimore, MD	1793	82.1	47.0
	Cincinnati, OH	2812	89.0	66.7
	Cleveland, OH	2780	88.6	66.1
	Denver-Boulder, CO	2125	84.7	56.9
	Minneapolis-St. Paul, MN	2218	87.4	56.5
	Phoenix, AZ	1735	70.1	50.7
	Pittsburgh, PA	2112	80.2	59.8
	Portland, OR	2046	84.9	52.4
	Sacramento, CA	1957	85.3	50.6
	San Diego, CA	1359	61.2	41.4
	Seattle-Tacoma, WA	1695	75.4	46.8
	St. Louis, MO	1968	85.5	52.2
	Tampa-St. Petersburg-Clearwater, FL	2534	89.3	62.1
3	Austin, TX	2740	95.1	67.9
	Birmingham, AL	2631	94.5	64.4
	Buffalo-Niagara Falls, NY	2839	93.2	68.3
	Charlotte-Gastonia-Rock Hill, NC-SC	2511	87.3	67.5
	Columbus, OH	2000	75.1	52.8
	Greensboro-Winston Salem-High Point, NC	2666	85.5	70.7
	Hartford-New Britain-Middletown, CT	2865	91.0	72.8
	Indianapolis, IN	1714	78.5	45.2
	Jacksonville, FL	2940	92.4	73.4
	Kansas City, MO-KS	2217	82.6	54.8
	Las Vegas, NV	1746	75.8	51.1
	Louisville, KY	3074	95.1	68.9
	McAllen-Brownsville-Harlingen, TX	2072	88.8	51.5
	Memphis, TN	2456	82.4	61.9
	Milwaukee-Racine, WI	2148	81.0	55.0
	Nashville, TN	2038	80.9	57.3

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
3 (cont.)	New Orleans, LA	3377	93.2	78.8
	Norfolk-Virginia Beach-Newport News, VA	1938	82.9	49.6
	Oklahoma City, OK	2088	86.3	52.6
	Orlando, FL	2757	91.1	69.9
	Providence-Warwick-Pawtucket, RI	1781	72.0	55.4
	Raleigh-Durham, NC	1860	81.3	48.9
	Richmond, VA	2897	92.8	66.8
	Rochester, NY	2384	90.8	59.4
	Salt Lake City-Ogden-Provo, UT	1573	75.0	43.3
	San Antonio, TX	2025	85.6	51.6
	West Palm Beach-Boca Raton, FL	2664	82.3	70.6
4	Albany-Schenectady-Troy, NY	2837	94.1	67.7
	Albuquerque, NM	2509	93.7	63.2
	Allentown-Bethlehem, PA	2274	85.1	60.7
	Bakersfield, CA	1863	77.8	51.7
	Baton Rouge, LA	2895	94.3	69.8
	Dayton, OH	3021	91.4	69.7
	El Paso, TX	1706	76.1	45.3
	Fresno, CA	1863	73.5	56.1
	Ft. Myers-Naples-Marco Island, FL	1521	69.1	42.7
	Grand Rapids, MI	3477	92.3	71.2
	Greenville-Spartanburg, SC	2548	86.6	67.0
	Harrisburg-Lebanon-Carlisle, PA	2520	83.1	64.2
	Honolulu, HI	2658	94.5	66.3
	Knoxville, TN	2311	89.2	58.4
	Little Rock, AR	2966	92.3	73.0
	Monterey-Salinas-Santa Cruz, CA	1461	64.7	46.1
	Omaha-Council Bluffs, NE-IA	3230	100.0	72.4
	Springfield, MA	2072	78.9	56.2
	Syracuse, NY	2913	93.7	66.7
	Toledo, OH	3496	93.5	82.6
	Tucson, AZ	2216	90.9	56.9
	Tulsa, OK	1890	79.8	50.9
	Wilkes Barre-Scranton, PA	2170	82.6	60.6
5	Appleton-Oshkosh, WI	3351	98.1	75.9
	Atlantic City-Cape May, NJ	2457	86.1	62.9
	Augusta, GA	3079	94.9	70.6
	Beaumont-Port Arthur, TX	3008	90.5	74.5
	Biloxi-Gulfport-Pascagoula, MS	1999	81.2	54.5
	Boise, ID	3139	97.7	69.4
	Burlington-Plattsburgh, VT-NY	1944	75.1	52.6
	Charleston, SC	2934	93.2	71.6
	Chattanooga, TN	2508	91.9	58.8
	Colorado Springs, CO	2124	80.7	59.4

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
5 (cont.)	Columbia, SC	2464	92.1	59.7
	Corpus Christi, TX	2114	83.4	53.2
	Des Moines, IA	3136	98.2	68
	Fayetteville, NC	2866	79.5	69.8
	Flint, MI	1698	73.7	48.3
	Ft. Wayne, IN	2038	81.9	51.8
	Gainesville-Ocala, FL	1244	63.0	34.6
	Greenville-New Bern-Jacksonville, NC	2637	82.1	71.1
	Huntsville, AL	2014	80.4	53.8
	Jackson, MS	2361	86.0	63.9
	Johnson City-Kingsport-Bristol, TN-VA	2900	88.9	71.3
	Lafayette, LA	2620	81.4	70.7
	Lansing-East Lansing, MI	3743	95.9	75.5
	Lexington-Fayette, KY	3050	93.8	69.5
	Madison, WI	2711	89.9	68.4
	Mobile, AL	2932	89.6	74.3
	Modesto, CA	1957	70.7	58.1
	Oxnard-Ventura, CA	1266	64.1	36.5
	Pensacola, FL	2039	82.4	53.4
	Quad Cities, IA-IL	4634	96.0	85.9
	Reno, NV	2054	87.4	53.1
	Roanoke-Lynchburg, VA	3508	93.6	81.8
	Saginaw-Bay City-Midland, MI	2667	90.6	66.9
	Santa Rosa, CA	1033	54.4	30.2
	Shreveport, LA	3004	97.7	65.7
	Spokane, WA	2917	96.9	62.6
	Wichita, KS	2966	95.8	68.3
	Youngstown-Warren, OH	3473	91.2	82.1
6	Amarillo, TX	2458	91.0	63.0
	Anchorage, AK	2898	92.9	72.2
	Binghamton, NY	3645	95.8	83.6
	Charleston, WV	3988	99.2	87.6
	Columbus, GA	3572	99.1	75.0
	Duluth-Superior, MN-WI	3028	97.4	68.9
	Erie, PA	4268	95.6	90.0
	Evansville, IN	4013	94.6	88.9
	Fayetteville, AR	2880	90.3	73.3
	Ft. Smith, AR	2212	86.0	56.4
	Huntington-Ashland, WV-KY	3900	88.0	77.9
	Lubbock, TX	2501	82.0	63.6
	Macon, GA	3802	94.2	86.7
	Montgomery, AL	3006	94.2	71.7
	Morgantown-Clarksburg-Fairmont, WV	2414	78.8	62.1
	Myrtle Beach, SC	1970	82.1	54.5

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
6 (cont.)	Odessa-Midland, TX	2185	86.2	55.8
	Palm Springs, CA	1581	67.8	44.7
	Peoria, IL	2581	92.0	62.9
	Portland, ME	2579	95.2	62.6
	Richland-Kennewick-Pasco, WA	2686	90.4	64.1
	Salisbury-Ocean City, MD	2849	89.3	71.9
	Savannah, GA	3071	97.1	73.1
	South Bend, IN	1601	77.1	41.4
	Springfield, MO	2705	98.3	63.3
	Terre Haute, IN	2730	89.1	63.9
	Traverse City-Petoskey, MI	2696	92.8	62.9
	Tyler-Longview, TX	2141	84.8	58.4
	Utica-Rome, NY	3030	89.4	74.1
	Wausau-Stevens Point, WI	3126	90.1	76.0
	Wilmington, NC	3152	94.8	75.3
	Yakima, WA	3458	100.0	79.7
7	Asheville, NC	4734	97.3	83.0
	Cape Cod, MA	1787	72.5	51.4
	Chico, CA	2330	89.6	56.3
	Dothan, AL	2434	85.1	63.1
	Eugene-Springfield, OR	3003	97.1	67.2
	Flagstaff-Prescott, AZ	1411	66.9	46.4
	Green Bay, WI	3608	98.2	81.3
	Hagerstown-Chambersburg-Waynesboro, MD-PA	2111	83.4	55.9
	Johnstown, PA	3736	82.6	69.1
	Kalamazoo, MI	2105	88.0	53.0
	Laredo, TX	4465	94.6	81.4
	Lebanon-Rutland-White River Junction, NH-VT	2113	83.6	56.0
	Lincoln, NE	2446	91.7	57.1
	Muncie-Marion, IN	1797	78.6	47.6
	New London, CT	1894	80.0	51.4
	Poughkeepsie, NY	1950	79.9	54.7
	Rockford, IL	2280	75.9	64.1
	San Luis Obispo, CA	2004	77.9	58.8
	Santa Barbara, CA	2782	77.7	62.7
	Tallahassee, FL	2972	94.7	71.5
	Topeka, KS	1606	68.7	49.9
	Tupelo, MS	2172	73.4	56.4
	Waco, TX	2114	69.5	51.0
8	Abilene, TX	3114	95.5	75.8
	Albany, GA	3883	97.6	87.1
	Alexandria, LA	1516	70.9	39.9

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
8 (cont.)	Altoona, PA	5458	96.7	94.2
	Bangor, ME	3518	99.0	80.1
	Bend, OR	3192	100.0	68.8
	Billings, MT	3906	99.3	79.6
	Bismarck, ND	5458	100.0	95.4
	Bryan-College Station, TX	1979	78.0	54.4
	Casper, WY	4996	100.0	91.6
	Columbia, MO	3807	93.6	86.2
	Eau Claire, WI	4270	100.0	91.4
	Fargo-Moorhead, ND-MN	3163	97.2	76.2
	Florence, SC	3694	92.2	81.1
	Grand Forks, ND-MN	4022	98.9	88.9
	Grand Junction, CO	4945	100.0	97.3
	Great Falls, MT	2880	96.1	67.5
	Harrisonburg, VA	3376	93.1	80.1
	Jackson, TN	2457	85.3	63.3
	La Crosse, WI	2382	85.4	60.6
	Lake Charles, LA	3562	95.3	81.5
	Laurel-Hattiesburg, MS	3620	94.6	83.2
	Lima, OH	3941	94.0	87.9
	Marion-Carbondale, IL	3174	93.6	77.1
	Medford-Ashland, OR	3563	99.3	82.0
	Meridian, MS	2628	90.7	65.7
	Monroe, LA	3218	89.3	70.5
	Panama City, FL	3101	98.6	72.0
	Parkersburg-Marietta, WV-OH	4255	98.5	91.9
	Rapid City, SD	2734	84.6	66.3
	Redding, CA	4592	100.0	94.8
	San Angelo, TX	3316	98.9	77.9
	Sioux City, IA	3745	99.1	84.8
	Texarkana, TX-AR	2883	89.9	69.1
	Waterloo-Cedar Falls, IA	3309	94.7	78.7
	Watertown, NY	4422	100.0	92.0
	Wheeling, WV	5024	96.6	88.8
	Wichita Falls, TX	4068	95.8	89.7
	Williamsport, PA	4536	99.2	95.1
9	Beckley, WV	3683	91.8	81.8
	Bloomington, IL	3783	90.2	79.2
	Bluefield, WV	2964	80.8	61.9
	Bowling Green, KY	1750	75.6	47.6
	Brunswick, GA	2804	91.0	70.0
	Cedar Rapids, IA	2608	91.1	65.2
	Champaign, IL	2178	83.8	56.5
	Charlottesville, VA	3328	91.9	77.2

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
9 (cont.)	Cheyenne, WY	4242	93.3	81.1
	Columbus-Starkville-West Point, MS	2366	79.5	65.6
	Cookeville, TN	4382	91.4	82.8
	Decatur, IL	3328	95.1	73.5
	Dubuque, IA	2616	86.5	70.1
	Elizabeth City-Nags Head, NC	1496	64.8	46.2
	Elkins-Buckhannon-Weston, WV	2139	81.2	56.2
	Elmira-Corning, NY	1690	73.7	49.7
	Florence-Muscle Shoals, AL	1619	73.8	45.0
	Ft. Walton Beach, FL	2328	80.4	58.1
	Ithaca, NY	3725	90.5	71.2
	Jonesboro, AR	4752	100.0	97.4
	Joplin, MO	2929	91.7	72.7
	Lafayette, IN	3582	88.3	78.5
	LaSalle-Peru, IL	1571	67.8	50.5
	Lawton, OK	3122	86.6	70.7
	Mankato-New Ulm-St Peter, MN	2267	86.0	59.5
	Mason City, IA	3960	100.0	82.5
	Meadville-Franklin, PA	4688	86.4	74.3
	Montpelier-Barre-St Johnsbury, VT	1722	70.1	48.2
	Olean, NY	1393	58.7	42.3
	Pittsburg, KS	1631	68.2	49.3
	Rochester, MN	3257	92.4	74.3
	Santa Maria-Lompoc, CA	2428	79.3	63.5
	Sebring, FL	3371	80.7	63.6
	St. Cloud, MN	1828	72.9	53.7
	State College, PA	4021	97.1	80.0
	Sunbury-Selinsgrove-Lewsiburg, PA	1788	80.7	47.3
	Tuscaloosa, AL	2428	89.4	60.8
	Valdosta, GA	2580	80.3	66.1
	Winchester, VA	2698	78.6	66.8
10	Ann Arbor, MI	2138	83.5	53.2
	Augusta-Waterville, ME	2709	89.8	69.7
	Battle Creek, MI	2185	89.8	55.0
	Clarksville-Hopkinsville, TN-KY	1985	74.6	59.2
	Concord, NH	2092	79.5	58.7
	Danbury, CT	1531	71.4	40.8
	Frederick, MD	2419	80.8	61.3
	Fredericksburg, VA	1289	61.5	39.9
	Hamptons-Riverhead, NY	1243	61.3	32.4
	Hilton Head, SC	1720	73.7	50.6
	Killeen-Temple, TX	2763	88.7	70.8
	Lewiston-Auburn, ME	2783	90.7	71.2
	Manchester, NH	1669	71.1	50.2

Market Group	Local Market	Ratings HHI	Ratings CR4	Ratings CR2
10 (cont.)	Merced, CA	1745	76.6	50.9
	Muskegon, MI	4646	94.5	85.7
	New Bedford-Fall River, MA	1765	70.1	55.4
	New River Valley, VA	4525	94.6	82.6
	Pueblo, CO	2916	84.5	65.6
	Rocky Mount-Wilson, NC	n/a	n/a	n/a
	Santa Fe, NM	2017	84.4	54.7
	Sheboygan, WI	1803	71.6	52.3
	Sussex, NJ	3035	85.1	65.5
	The Florida Keys, FL	n/a	n/a	n/a
11	Akron, OH	2054	78.2	55.5
	Bridgeport, CT	1754	77.2	52.4
	Canton, OH	1604	71.6	46.6
	Daytona Beach, FL	1947	85.2	50.5
	Ft. Collins-Greeley, CO	2464	80.5	63.8
	Ft. Pierce-Stuart-Vero Beach, FL	2583	85.7	61.4
	Lakeland-Winter Haven, FL	2390	92.8	57.4
	Lancaster, PA	1870	79.4	50.4
	Melbourne-Titusville-Cocoa, FL	2594	88.5	61.5
	Morristown, NJ	1853	79.5	53.6
	New Haven, CT	1812	76.2	51.2
	Newburgh-Middletown, NY	1514	71.1	43.7
	Portsmouth-Dover-Rochester, NH	1712	71.9	50.6
	Reading, PA	1858	74.4	53.5
	Sarasota-Bradenton, FL	3866	94.3	77.5
	Stamford-Norwalk, CT	1456	67.2	44.4
	Stockton, CA	2201	75.9	60.4
	Trenton, NJ	1461	66.0	42.7
	Victor Valley, CA	2668	71.2	59.6
	Visalia-Tulare-Hanford, CA	1670	73.0	51.4
	Wilmington, DE	1533	70.6	42.7
	Worcester, MA	1913	77.0	46.7
	York, PA	1325	65.1	39.9
12	Middlesex-Somerset-Union, NJ	1240	60.4	40.5
	Monmouth-Ocean, NJ	1476	66.7	43.3
	Nassau-Suffolk, NY	1528	69.9	47.2
	Riverside-San Bernardino, CA	1525	64.2	48.3
	San Jose, CA	1564	63.5	44.6

Appendix D: Revenue-Based HHI, Four-Firm Concentration Ratio, and Two-Firm Concentration Ratios for each Local Market, Fall 2005, Organized by Market Group.

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
1	Atlanta, GA	1582	69.2	45.3
	Boston, MA	2206	87.6	55.2
	Chicago, IL	1678	70.2	51.5
	Dallas-Ft. Worth, TX	1507	71.5	42.8
	Detroit, MI	2351	91.5	60.3
	Houston-Galveston, TX	1784	72.9	47.4
	Los Angeles, CA	1546	65.9	51.4
	Miami-Ft. Lauderdale-Hollywood, FL	1547	71.2	40.4
	New York, NY	1928	77.2	57.1
	Philadelphia, PA	2205	84.0	60.7
	San Francisco, CA	1420	67.0	44.1
	Washington, DC	1732	76.6	46.0
2	Baltimore, MD	2197	91.1	53.8
	Cincinnati, OH	3501	96.0	75.4
	Cleveland, OH	3090	95.1	72.3
	Denver-Boulder, CO	2636	90.3	61.9
	Minneapolis-St. Paul, MN	2478	93.2	59.8
	Phoenix, AZ	1942	79.0	53.0
	Pittsburgh, PA	2334	79.8	65.4
	Portland, OR	2226	86.8	57.5
	Sacramento, CA	2273	89.5	55.3
	San Diego, CA	1735	68.8	46.1
	Seattle-Tacoma, WA	1996	80.3	55.9
	St. Louis, MO	2144	89.4	53.5
	Tampa-St. Petersburg-Clearwater, FL	2818	91.8	68.2
3	Austin, TX	2848	93.8	69.1
	Birmingham, AL	2759	93.8	63.4
	Buffalo-Niagara Falls, NY	3155	98.2	67.7
	Charlotte-Gastonia-Rock Hill, NC-SC	3041	95.5	72.2
	Columbus, OH	1949	73.7	50.4
	Greensboro-Winston Salem-High Point, NC	2580	89.3	68.2
	Hartford-New Britain-Middletown, CT	3406	96.5	77.8
	Indianapolis, IN	1829	81.0	45.8
	Jacksonville, FL	3308	93.9	77.4
	Kansas City, MO-KS	2526	90.5	62.2
	Las Vegas, NV	1853	81.1	51.3
	Louisville, KY	3467	95.9	73.6
	McAllen-Brownsville-Harlingen, TX	2540	96.7	62.1
	Memphis, TN	2289	87.4	58.7
	Milwaukee-Racine, WI	1920	85.2	47.9
	Nashville, TN	2215	85.5	56.0

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
3 (cont.)	New Orleans, LA	3613	95.3	83.4
	Norfolk-Virginia Beach-Newport News, VA	2101	83.9	51.5
	Oklahoma City, OK	2532	92.3	59.6
	Orlando, FL	2616	89.9	66.5
	Providence-Warwick-Pawtucket, RI	3158	89.8	78.3
	Raleigh-Durham, NC	2241	85.7	54.6
	Richmond, VA	3147	93.7	72.9
	Rochester, NY	2681	93.0	65.8
	Salt Lake City-Ogden-Provo, UT	1977	82.9	52.1
	San Antonio, TX	2041	83.9	53.5
	West Palm Beach-Boca Raton, FL	3095	94.8	75.5
4	Albany-Schenectady-Troy, NY	2789	92.9	65.3
	Albuquerque, NM	2639	93.0	64.1
	Allentown-Bethlehem, PA	2910	95.2	64.2
	Bakersfield, CA	1799	79.3	44.7
	Baton Rouge, LA	3191	98.8	70.5
	Dayton, OH	3271	95.3	73.5
	El Paso, TX	1899	82.1	46.4
	Fresno, CA	2418	83.0	65.5
	Ft. Myers-Naples-Marco Island, FL	1701	76.9	46.1
	Grand Rapids, MI	3174	94.2	69.1
	Greenville-Spartanburg, SC	2330	91.7	59.4
	Harrisburg-Lebanon-Carlisle, PA	3200	95.7	76.0
	Honolulu, HI	2878	95.7	68.2
	Knoxville, TN	2760	90.3	68.3
	Little Rock, AR	3028	93.5	75.3
	Monterey-Salinas-Santa Cruz, CA	1892	75.3	52.5
	Omaha-Council Bluffs, NE-IA	3450	99.2	78.0
	Springfield, MA	2586	94.7	64.7
	Syracuse, NY	3301	96.6	73.7
	Toledo, OH	4356	97.4	93.2
	Tucson, AZ	2159	92.1	49.9
	Tulsa, OK	2112	83.8	57.0
	Wilkes Barre-Scranton, PA	2620	89.8	66.9
5	Appleton-Oshkosh, WI	3349	98.9	70.9
	Atlantic City-Cape May, NJ	2982	93.2	71.9
	Augusta, GA	3227	94.8	76.5
	Beaumont-Port Arthur, TX	3953	96.9	79.3
	Biloxi-Gulfport-Pascagoula, MS	3185	97.8	71.7
	Boise, ID	3292	97.3	74.1
	Burlington-Plattsburgh, VT-NY	2275	84.3	61.5
	Charleston, SC	2840	91.3	71.6
	Chattanooga, TN	2511	92.8	62.0
	Colorado Springs, CO	2049	81.2	57.3

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
5 (cont.)	Columbia, SC	3185	99.4	68.3
	Corpus Christi, TX	3451	90.6	69.1
	Des Moines, IA	3280	98.1	72.8
	Fayetteville, NC	4155	94.3	88.3
	Flint, MI	3708	100.0	83.8
	Ft. Wayne, IN	2497	86.3	63.4
	Gainesville-Ocala, FL	1868	81.1	48.7
	Greenville-New Bern-Jacksonville, NC	3706	93.9	84.2
	Huntsville, AL	2267	86.7	58.3
	Jackson, MS	2449	87.7	64.3
	Johnson City-Kingsport-Bristol, TN-VA	2693	91.2	65.3
	Lafayette, LA	3341	90.2	79.5
	Lansing-East Lansing, MI	5076	100.0	88.1
	Lexington-Fayette, KY	3970	97.9	78.6
	Madison, WI	2981	92.9	72.6
	Mobile, AL	3204	93.0	75.8
	Modesto, CA	3503	90.5	79.3
	Oxnard-Ventura, CA	3041	93.1	75.3
	Pensacola, FL	3080	94.8	68.5
	Quad Cities, IA-IL	5251	100.0	87.7
	Reno, NV	2026	88.6	48.8
	Roanoke-Lynchburg, VA	3742	94.4	85.1
	Saginaw-Bay City-Midland, MI	3454	97.1	79.1
	Santa Rosa, CA	2665	91.2	68.4
	Shreveport, LA	3132	98.1	67.4
	Spokane, WA	2815	94.5	65.5
	Wichita, KS	3119	96.5	73.4
	Youngstown-Warren, OH	4259	98.7	91.7
6	Amarillo, TX	2189	89.6	54.8
	Anchorage, AK	2256	87.3	60.7
	Binghamton, NY	3600	98.3	82.9
	Charleston, WV	4320	100.0	90.3
	Columbus, GA	3841	100.0	76.0
	Duluth-Superior, MN-WI	3046	97.6	70.7
	Erie, PA	4979	99.3	94.9
	Evansville, IN	4331	96.8	92.4
	Fayetteville, AR	3812	93.2	81.4
	Ft. Smith, AR	2795	87.0	63.5
	Huntington-Ashland, WV-KY	3812	93.0	78.9
	Lubbock, TX	2520	86.1	65.7
	Macon, GA	4266	95.8	90.1
	Montgomery, AL	4044	97.2	85.0
	Morgantown-Clarksburg-Fairmont, WV	2495	88.2	63.8
	Myrtle Beach, SC	2351	91.0	57.2

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
6 (cont.)	Odessa-Midland, TX	2149	84.8	54.1
	Palm Springs, CA	1498	69.0	40.7
	Peoria, IL	3171	97.0	69.5
	Portland, ME	3373	100.0	74.7
	Richland-Kennewick-Pasco, WA	3350	97.9	75.6
	Salisbury-Ocean City, MD	2451	92.8	61.0
	Savannah, GA	3594	99.5	82.9
	South Bend, IN	1991	84.3	50.5
	Springfield, MO	2866	97.5	68.9
	Terre Haute, IN	2691	85.1	62.5
	Traverse City-Petoskey, MI	2314	87.4	56.0
	Tyler-Longview, TX	2625	90.4	68.4
	Utica-Rome, NY	4194	94.8	87.4
	Wausau-Stevens Point, WI	3520	95.5	81.3
	Wilmington, NC	4153	99.5	89.6
	Yakima, WA	3221	98.4	76.8
7	Asheville, NC	5993	99.2	95.4
	Cape Cod, MA	2159	82.9	58.1
	Chico, CA	3358	100.0	71.5
	Dothan, AL	2400	86.3	63.2
	Eugene-Springfield, OR	2831	95.2	64.4
	Flagstaff-Prescott, AZ	1339	64.6	42.2
	Green Bay, WI	4004	100.0	88.1
	Hagerstown-Chambersburg-Waynesboro, MD-PA	3280	96.3	77.5
	Johnstown, PA	4970	97.8	90.3
	Kalamazoo, MI	3223	99.3	71.3
	Laredo, TX	5949	100.0	99.1
	Lebanon-Rutland-White River Junction, NH-VT	2996	93.7	72.1
	Lincoln, NE	3431	100.0	73.1
	Muncie-Marion, IN	3389	100.0	72.7
	New London, CT	3562	100.0	79.0
	Poughkeepsie, NY	3463	99.8	80.5
	Rockford, IL	4808	100.0	97.2
	San Luis Obispo, CA	2662	87.6	69.8
	Santa Barbara, CA	3487	90.9	76.0
	Tallahassee, FL	3338	96.6	76.8
	Topeka, KS	2345	85.2	61.5
	Tupelo, MS	3045	86.0	66.3
	Waco, TX	3424	91.0	75.1
8	Abilene, TX	2733	90.3	70.0
	Albany, GA	4271	100.0	91.8
	Alexandria, LA	1835	77.3	51.4

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
8 (cont.)	Altoona, PA	5887	100.0	92.9
	Bangor, ME	3540	98.4	81.6
	Bend, OR	n/a	n/a	n/a
	Billings, MT	3597	98.7	77.1
	Bismarck, ND	6490	100.0	95.7
	Bryan-College Station, TX	2023	84.8	51.8
	Casper, WY	5022	100.0	92.5
	Columbia, MO	3642	96.0	82.9
	Eau Claire, WI	3932	99.1	87.2
	Fargo-Moorhead, ND-MN	3991	98.3	87.9
	Florence, SC	4167	98.4	89.5
	Grand Forks, ND-MN	4233	100.0	91.6
	Grand Junction, CO	4703	100.0	93.8
	Great Falls, MT	3484	94.4	81.3
	Harrisonburg, VA	3176	89.7	77.7
	Jackson, TN	2616	85.1	69.0
	La Crosse, WI	3021	95.8	69.2
	Lake Charles, LA	4269	100.0	91.8
	Laurel-Hattiesburg, MS	3529	93.8	82.6
	Lima, OH	5015	100.0	96.8
	Marion-Carbondale, IL	4025	96.6	88.9
	Medford-Ashland, OR	3741	100.0	84.1
	Meridian, MS	2721	92.4	65.3
	Monroe, LA	2389	88.4	60.9
	Panama City, FL	3620	100.0	79.4
	Parkersburg-Marietta, WV-OH	4083	98.4	84.9
	Rapid City, SD	2673	87.8	61.9
	Redding, CA	5048	100.0	97.5
	San Angelo, TX	3334	100.0	78.6
	Sioux City, IA	3541	99.7	79.5
	Texarkana, TX-AR	3671	90.1	70.0
	Waterloo-Cedar Falls, IA	4161	100.0	85.2
	Watertown, NY	5213	100.0	100.0
	Wheeling, WV	4668	96.1	90.6
	Wichita Falls, TX	5117	100.0	100.0
	Williamsport, PA	4475	98.1	92.5
9	Beckley, WV	5382	100.0	98.1
	Bloomington, IL	5828	100.0	98.7
	Bluefield, WV	3837	94.4	82.7
	Bowling Green, KY	2713	81.7	63.0
	Brunswick, GA	5836	100.0	95.7
	Cedar Rapids, IA	3087	97.1	73.7
	Champaign, IL	2644	90.3	63.6
	Charlottesville, VA	4406	100.0	93.0

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
9 (cont.)	Cheyenne, WY	3145	94.5	74.2
	Columbus-Starkville-West Point, MS	4229	98.2	78.9
	Cookeville, TN	5039	100.0	94.6
	Decatur, IL	3967	100.0	84.1
	Dubuque, IA	3320	100.0	75.4
	Elizabeth City-Nags Head, NC	3147	97.9	71.8
	Elkins-Buckhannon-Weston, WV	4321	100.0	88.9
	Elmira-Corning, NY	2352	89.0	60.8
	Florence-Muscle Shoals, AL	2875	87.6	67.6
	Ft. Walton Beach, FL	4694	95.5	87.4
	Ithaca, NY	5297	100.0	94.1
	Jonesboro, AR	5001	100.0	100.0
	Joplin, MO	4254	97.7	84.9
	Lafayette, IN	2645	95.6	65.2
	LaSalle-Peru, IL	2953	91.0	68.1
	Lawton, OK	4143	100.0	75.8
	Mankato-New Ulm-St Peter, MN	2921	100.0	67.9
	Mason City, IA	5424	100.0	99.1
	Meadville-Franklin, PA	8405	100.0	98.2
	Montpelier-Barre-St Johnsbury, VT	3436	99.1	72.2
	Olean, NY	1859	73.7	49.7
	Pittsburg, KS	2362	74.5	57.4
	Rochester, MN	4462	100.0	93.0
	Santa Maria-Lompoc, CA	2693	87.8	66.5
	Sebring, FL	9050	100.0	100.0
	St. Cloud, MN	3597	99.1	83.2
	State College, PA	2877	95.5	66.7
	Sunbury-Selinsgrove-Lewsiburg, PA	10,000	100.0	100.0
	Tuscaloosa, AL	3153	95.7	72.7
	Valdosta, GA	3667	94.6	81.0
	Winchester, VA	4019	100.0	88.4
10	Ann Arbor, MI	7324	100.0	95.8
	Augusta-Waterville, ME	4787	100.0	97.4
	Battle Creek, MI	9796	100.0	100.0
	Clarksville-Hopkinsville, TN-KY	5322	97.8	90.7
	Concord, NH	4019	92.2	73.7
	Danbury, CT	5002	100.0	100.0
	Frederick, MD	5158	100.0	98.3
	Fredericksburg, VA	3518	100.0	77.4
	Hamptons-Riverhead, NY	2431	94.1	56.4
	Hilton Head, SC	5289	97.4	83.3
	Killeen-Temple, TX	4878	100.0	98.3
	Lewiston-Auburn, ME	5556	100.0	100.0
	Manchester, NH	4223	98.1	89.0

Market Group	Local Market	Revenue HHI	Revenue CR4	Revenue CR2
10 (cont.)	Merced, CA	3515	90.0	81.5
	Muskegon, MI	6785	100.0	95.6
	New Bedford-Fall River, MA	5156	98.1	83.3
	New River Valley, VA	7974	100.0	93.9
	Pueblo, CO	4517	99.1	80.4
	Rocky Mount-Wilson, NC	10,000	100.0	100.0
	Santa Fe, NM	2480	89.7	64.3
	Sheboygan, WI	3986	100.0	78.2
	Sussex, NJ	10,000	100.0	100.0
	The Florida Keys, FL	n/a	n/a	n/a
11	Akron, OH	3865	100.0	76.7
	Bridgeport, CT	4708	96.3	89.7
	Canton, OH	4790	97.5	87.9
	Daytona Beach, FL	7601	98.5	92.0
	Ft. Collins-Greeley, CO	3600	89.8	81.7
	Ft. Pierce-Stuart-Vero Beach, FL	2850	91.3	69.6
	Lakeland-Winter Haven, FL	6678	94.1	86.4
	Lancaster, PA	2608	97.4	59.9
	Melbourne-Titusville-Cocoa, FL	4119	98.4	90.1
	Morristown, NJ	9497	100.0	98.7
	New Haven, CT	3722	100.0	84.3
	Newburgh-Middletown, NY	3234	96.6	72.4
	Portsmouth-Dover-Rochester, NH	4035	98.0	89.0
	Reading, PA	5509	100.0	85.5
	Sarasota-Bradenton, FL	8179	98.7	95.0
	Stamford-Norwalk, CT	4755	100.0	95.9
	Stockton, CA	3573	100.0	76.1
	Trenton, NJ	4433	99.1	91.6
	Victor Valley, CA	2243	75.9	57.1
	Visalia-Tulare-Hanford, CA	2712	92.8	68.5
	Wilmington, DE	3464	100.0	72.6
	Worcester, MA	4543	96.9	91.2
	York, PA	4447	96.6	81.5
12	Middlesex-Somerset-Union, NJ	8580	100.0	100.0
	Monmouth-Ocean, NJ	4149	100.0	81.6
	Nassau-Suffolk, NY	2812	94.5	65.0
	Riverside-San Bernardino, CA	1829	79.4	46.8
	San Jose, CA	1796	78.8	49.4

Appendix E: Local Ownership Index in 1975, 1985, 1995, and 2005, and the Number of New Stations for Completely Local Owners, for each Local Market, Organized by Market Group.

Market Group	Local Market	Local Ownership Index				Existing Stations	New, Completely Local Stations Needed
		1975	1985	1995	2005		
1	Atlanta, GA	95.91	96.02	94.63	71.30	81	104
	Boston, MA	97.68	97.62	96.16	79.03	92	65
	Chicago, IL	96.70	96.61	93.94	76.35	129	89
	Dallas-Ft. Worth, TX	94.88	95.06	92.41	70.81	81	83
	Detroit, MI	95.62	95.82	93.06	66.37	60	94
	Houston-Galveston, TX	96.87	96.27	92.43	66.08	69	102
	Los Angeles, CA	94.95	94.47	92.27	66.43	88	125
	Miami-Ft. Lauderdale-Hollywood, FL	95.92	95.92	94.55	67.05	54	92
	New York, NY	93.96	94.31	92.46	70.91	73	75
	Philadelphia, PA	95.62	96.06	92.93	72.64	68	61
	San Francisco, CA	94.54	94.40	91.36	65.90	64	86
	Washington, DC	93.28	93.80	93.29	61.58	52	113
2	Baltimore, MD	93.41	93.98	93.80	68.63	36	52
	Cincinnati, OH	95.83	96.53	95.86	62.98	46	115
	Cleveland, OH	95.39	95.82	96.20	62.07	40	112
	Denver-Boulder, CO	95.06	95.35	91.77	60.68	52	103
	Minneapolis-St. Paul, MN	93.93	94.32	93.33	63.66	54	105
	Phoenix, AZ	94.45	95.30	95.11	63.55	54	122
	Pittsburgh, PA	96.55	96.97	95.69	74.15	65	72
	Portland, OR	96.23	96.67	93.92	65.15	56	109
	Sacramento, CA	94.97	95.82	92.99	64.56	48	88
	San Diego, CA	97.49	95.90	93.05	55.16	31	91
	Seattle-Tacoma, WA	95.75	95.87	94.73	72.70	76	87
	St. Louis, MO	95.89	96.11	95.28	74.43	69	71
	Tampa-St. Petersburg-Clearwater, FL	94.76	94.44	91.44	59.97	48	96
3	Austin, TX	98.53	98.49	97.77	64.46	38	107
	Birmingham, AL	96.94	97.52	94.77	66.14	45	85
	Buffalo-Niagara Falls, NY	95.17	95.60	89.87	70.35	29	24
	Charlotte-Gastonia-Rock Hill, NC-SC	97.77	97.78	92.57	68.80	49	60
	Columbus, OH	98.09	97.89	95.19	66.38	44	84
	Greensboro-Winston Salem-High Point, NC	98.45	98.46	95.45	73.56	52	61
	Hartford-New Britain-Middletown, CT	99.07	98.16	93.77	65.32	34	60

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
3 (cont.)	Indianapolis, IN	96.90	96.86	97.76	74.25	41	62
	Jacksonville, FL	95.82	96.67	95.50	64.13	45	102
	Kansas City, MO-KS	94.50	94.15	92.23	79.45	43	12
	Las Vegas, NV	99.63	99.22	99.35	96.89	41	56
	Louisville, KY	98.79	98.69	94.23	54.14	43	148
	McAllen-Brownsville-Harlingen, TX	98.25	98.81	98.69	64.95	29	85
	Memphis, TN	97.10	97.75	95.03	64.06	53	120
	Milwaukee-Racine, WI	97.32	97.47	94.47	64.61	42	85
	Nashville, TN	97.09	97.35	96.80	71.19	61	102
	New Orleans, LA	97.23	96.96	92.19	61.07	41	81
	Norfolk-Virginia Beach-Newport News, VA	96.42	96.17	94.05	72.47	45	48
	Oklahoma City, OK	98.28	96.82	95.42	63.04	41	98
	Orlando, FL	93.93	94.87	95.61	59.69	39	116
	Providence-Warwick-Pawtucket, RI	96.59	96.98	95.85	68.56	40	72
	Raleigh-Durham, NC	98.13	98.13	97.56	76.46	43	49
	Richmond, VA	95.63	95.90	92.89	62.67	40	78
	Rochester, NY	98.24	98.15	96.09	65.61	49	108
	Salt Lake City-Ogden-Provo, UT	97.87	97.89	95.09	67.68	65	115
	San Antonio, TX	95.19	95.11	94.11	65.60	52	94
	West Palm Beach-Boca Raton, FL	97.03	96.62	95.94	55.28	30	113
4	Albany-Schenectady-Troy, NY	98.24	98.28	96.75	69.52	51	93
	Albuquerque, NM	96.85	97.61	95.89	58.33	44	144
	Allentown-Bethlehem, PA	99.20	98.79	96.76	64.18	23	58
	Bakersfield, CA	99.48	99.33	97.81	65.40	38	99
	Baton Rouge, LA	99.19	99.29	97.88	53.11	26	130
	Dayton, OH	97.07	97.47	96.71	59.21	38	126
	El Paso, TX	98.00	98.40	97.87	56.20	23	98
	Fresno, CA	98.86	98.40	96.00	61.47	50	139
	Ft. Myers-Naples-Marco Island, FL	99.89	99.76	95.53	74.55	37	38
	Grand Rapids, MI	98.52	98.70	96.85	60.31	38	121
	Greenville-Spartanburg, SC	98.67	98.53	96.78	67.50	44	94
	Harrisburg-Lebanon-Carlisle, PA	98.85	98.93	97.50	55.85	29	122
	Honolulu, HI	99.14	98.59	98.14	58.98	37	146
	Knoxville, TN	97.67	97.93	97.43	89.80	44	0

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
4 (cont.)	Little Rock, AR	99.35	99.61	96.30	63.53	41	107
	Monterey-Salinas-Santa Cruz, CA	98.97	98.82	99.27	71.90	45	96
	Omaha-Council Bluffs, NE-IA	97.06	97.13	96.17	62.10	30	83
	Springfield, MA	99.42	99.20	95.14	66.36	30	57
	Syracuse, NY	95.21	95.75	95.58	67.72	41	72
	Toledo, OH	98.51	98.73	95.85	54.79	31	119
	Tucson, AZ	95.54	96.70	96.61	59.84	37	117
	Tulsa, OK	96.83	96.63	95.16	66.87	40	73
	Wilkes Barre-Scranton, PA	99.09	98.29	96.50	82.45	50	20
5	Appleton-Oshkosh, WI	98.21	98.42	96.84	76.47	20	21
	Atlantic City-Cape May, NJ	98.14	98.63	97.99	96.95	33	0
	Augusta, GA	98.05	98.64	95.02	59.42	34	94
	Beaumont-Port Arthur, TX	98.69	98.51	96.02	54.64	21	80
	Biloxi-Gulfport-Pascagoula, MS	98.74	98.95	97.23	62.94	23	66
	Boise, ID	98.41	98.55	98.72	58.00	33	145
	Burlington-Plattsburgh, VT-NY	99.45	98.17	97.31	71.25	37	63
	Charleston, SC	98.69	98.05	95.31	58.71	33	98
	Chattanooga, TN	95.14	95.89	96.00	62.09	33	87
	Colorado Springs, CO	99.24	98.48	95.94	59.63	26	80
	Columbia, SC	98.73	98.89	92.68	59.88	31	67
	Corpus Christi, TX	99.18	99.48	99.46	65.95	34	106
	Des Moines, IA	97.31	96.84	94.60	55.14	33	112
	Fayetteville, NC	99.50	99.07	99.15	72.72	21	45
	Flint, MI	100.00	99.88	99.13	67.09	18	57
	Ft. Wayne, IN	95.69	96.44	98.82	98.06	31	0
	Gainesville-Ocala, FL	99.87	98.94	98.03	93.86	38	0
	Greenville-New Bern-Jacksonville, NC	96.32	97.05	97.51	88.71	49	0
	Huntsville, AL	99.09	98.89	98.50	60.97	33	121
	Jackson, MS	99.00	98.91	97.10	65.84	33	78
	Johnson City-Kingsport-Bristol, TN-VA	98.76	98.48	98.86	88.58	41	1
	Lafayette, LA	98.91	98.86	97.45	97.16	31	39
	Lansing-East Lansing, MI	98.27	97.25	97.03	68.76	24	21
	Lexington-Fayette, KY	98.98	98.82	98.17	56.18	33	147
	Madison, WI	95.81	95.86	96.94	64.61	35	89
	Mobile, AL	97.96	98.42	99.55	61.15	27	112

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
5 (cont.)	Modesto, CA	94.89	96.07	95.52	60.06	24	68
	Oxnard-Ventura, CA	98.09	97.15	97.82	77.82	19	20
	Pensacola, FL	100.00	99.53	98.11	72.93	23	39
	Quad Cities, IA-IL	96.30	95.38	94.60	48.63	22	99
	Reno, NV	96.57	95.72	94.40	82.76	31	5
	Roanoke-Lynchburg, VA	99.39	99.06	98.21	62.85	41	128
	Saginaw-Bay City-Midland, MI	98.36	98.33	98.48	75.63	25	39
	Santa Rosa, CA	98.68	98.27	97.93	91.08	19	0
	Shreveport, LA	96.27	97.60	96.85	55.48	28	113
	Spokane, WA	96.91	96.94	94.75	60.66	35	89
	Wichita, KS	97.45	97.71	93.55	62.90	30	63
	Youngstown-Warren, OH	99.17	99.21	95.64	48.79	25	124
6	Amarillo, TX	97.87	98.66	97.64	54.66	28	130
	Anchorage, AK	97.92	97.67	97.94	61.68	29	95
	Binghamton, NY	95.64	95.98	98.04	49.38	21	124
	Charleston, WV	95.92	96.70	98.10	89.46	20	0
	Columbus, GA	99.01	96.82	93.73	46.83	21	92
	Duluth-Superior, MN-WI	97.59	95.96	95.25	70.97	29	39
	Erie, PA	99.99	99.99	96.26	77.07	19	18
	Evansville, IN	99.03	98.82	98.81	91.26	24	0
	Fayetteville, AR	98.01	98.25	98.84	56.61	26	126
	Ft. Smith, AR	97.87	98.51	98.82	58.30	30	132
	Huntington-Ashland, WV-KY	95.70	96.22	96.26	50.81	26	117
	Lubbock, TX	98.60	98.37	95.45	60.13	27	73
	Macon, GA	98.35	98.65	97.49	54.66	31	140
	Montgomery, AL	98.62	98.14	97.89	58.84	22	86
	Morgantown-Clarksburg-Fairmont, WV	100.00	99.76	99.11	95.34	30	0
	Myrtle Beach, SC	99.31	99.30	97.93	73.79	29	49
	Odessa-Midland, TX	99.70	99.68	99.27	55.32	27	143
	Palm Springs, CA	100.00	99.90	99.79	91.62	25	0
	Peoria, IL	97.24	97.76	98.20	87.77	22	1
	Portland, ME	98.66	98.43	95.24	76.99	30	24
	Richland-Kennewick-Pasco, WA	99.81	99.65	97.05	61.90	25	74
	Salisbury-Ocean City, MD	94.79	97.14	95.91	65.53	41	86
	Savannah, GA	98.61	98.27	95.18	48.21	23	112
	South Bend, IN	99.03	99.21	99.45	98.00	23	0
	Springfield, MO	95.11	95.94	96.54	64.54	27	65
	Terre Haute, IN	99.77	99.82	98.52	94.84	22	0

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
6 (cont.)	Traverse City-Petoskey, MI	99.35	99.47	98.87	98.89	36	0
	Tyler-Longview, TX	99.95	99.11	99.36	70.91	35	80
	Utica-Rome, NY	99.58	99.68	96.98	52.15	30	139
	Wausau-Stevens Point, WI	96.90	97.43	97.64	91.58	27	0
	Wilmington, NC	97.98	98.38	99.12	77.67	24	33
	Yakima, WA	99.85	99.90	98.59	57.17	26	114
7	Asheville, NC	99.72	99.48	98.44	54.34	21	102
	Cape Cod, MA	99.44	99.77	99.67	93.63	21	0
	Chico, CA	96.44	97.40	97.57	85.89	20	3
	Dothan, AL	99.96	99.61	99.74	94.42	28	0
	Eugene-Springfield, OR	96.52	96.78	97.47	64.13	31	87
	Flagstaff-Prescott, AZ	99.63	99.45	99.02	98.61	38	0
	Green Bay, WI	96.96	97.20	97.39	71.17	17	32
	Hagerstown-Chambersburg-Waynesboro, MD-PA	100.00	99.12	98.72	95.46	18	0
	Johnstown, PA	99.94	99.95	96.67	95.38	21	0
	Kalamazoo, MI	99.63	99.66	97.98	82.90	17	9
	Laredo, TX	99.49	99.30	99.25	81.62	10	0
	Lebanon-Rutland-White River Junction, NH-VT	100.00	99.89	99.31	58.98	42	180
	Lincoln, NE	94.47	95.80	96.60	56.51	16	59
	Muncie-Marion, IN	98.87	99.00	99.21	88.96	16	0
	New London, CT	95.34	95.65	94.88	74.84	12	11
	Poughkeepsie, NY	99.99	99.99	98.99	41.34	18	162
	Rockford, IL	98.51	98.40	97.24	75.58	14	17
	San Luis Obispo, CA	100.00	100.00	97.48	68.41	26	55
	Santa Barbara, CA	99.68	99.12	98.66	43.41	17	132
	Tallahassee, FL	96.01	97.12	96.67	55.98	26	102
	Topeka, KS	97.56	97.22	97.18	71.20	16	29
	Tupelo, MS	99.40	99.43	98.88	58.51	26	110
	Waco, TX	99.03	99.04	97.52	54.23	14	62
8	Abilene, TX	100.00	98.59	98.91	51.79	23	133
	Albany, GA	99.89	99.13	99.28	47.96	18	132
	Alexandria, LA	99.60	99.78	98.98	62.53	22	78
	Altoona, PA	99.74	99.36	97.96	98.47	14	0
	Bangor, ME	99.72	99.77	99.57	50.30	24	157
	Bend, OR	100.00	99.99	99.32	93.61	20	0
	Billings, MT	99.56	99.43	97.75	61.35	24	78
	Bismarck, ND	100.00	98.98	97.53	36.71	13	125
	Bryan-College Station, TX	99.90	99.88	99.30	70.71	19	43

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
8 (cont.)	Casper, WY	100.00	100.00	98.89	45.10	15	112
	Columbia, MO	99.17	98.75	98.79	78.56	20	23
	Eau Claire, WI	99.20	99.40	99.52	52.40	19	111
	Fargo-Moorhead, ND-MN	97.54	97.15	96.00	49.96	22	104
	Florence, SC	98.61	98.73	95.53	70.54	23	36
	Grand Forks, ND-MN	99.38	99.23	99.33	53.77	16	85
	Grand Junction, CO	99.76	99.57	99.74	75.82	20	36
	Great Falls, MT	100.00	100.00	97.06	91.89	15	0
	Harrisonburg, VA	98.62	98.96	99.53	59.64	20	85
	Jackson, TN	97.71	98.10	98.37	63.51	16	49
	La Crosse, WI	98.72	98.71	98.77	96.69	22	0
	Lake Charles, LA	99.96	99.98	99.02	78.45	16	44
	Laurel-Hattiesburg, MS	99.95	99.94	99.93	48.60	21	153
	Lima, OH	98.81	98.24	96.93	51.55	18	83
	Marion-Carbondale, IL	99.95	99.96	99.61	51.10	19	119
	Medford-Ashland, OR	99.08	99.06	98.22	62.79	23	72
	Meridian, MS	99.48	99.31	98.32	53.52	16	78
	Monroe, LA	99.89	99.88	96.55	95.80	22	0
	Panama City, FL	99.59	99.49	99.82	53.97	20	113
	Parkersburg-Marietta, WV-OH	99.69	99.26	98.97	58.98	21	87
	Rapid City, SD	99.07	99.44	97.25	90.17	20	0
	Redding, CA	100.00	99.38	97.39	85.39	21	4
	San Angelo, TX	100.00	99.85	99.43	88.83	17	1
	Sioux City, IA	97.21	97.96	96.32	51.06	16	73
	Texarkana, TX-AR	97.87	98.62	98.28	55.48	19	87
	Waterloo-Cedar Falls, IA	92.23	93.79	94.35	84.01	19	1
	Watertown, NY	99.87	99.84	96.98	85.24	15	2
	Wheeling, WV	98.96	99.02	98.37	53.30	19	94
	Wichita Falls, TX	97.29	97.43	96.74	39.60	11	89
	Williamsport, PA	99.87	99.93	99.84	57.56	19	92
9	Beckley, WV	99.91	99.61	99.59	97.02	10	0
	Bloomington, IL	100.00	98.01	96.00	91.09	12	0
	Bluefield, WV	100.00	100.00	97.10	84.22	18	5
	Bowling Green, KY	98.99	98.81	99.86	98.32	23	0
	Brunswick, GA	99.92	99.92	99.35	91.95	12	0
	Cedar Rapids, IA	98.53	98.65	99.69	44.79	14	116
	Champaign, IL	99.91	99.82	97.12	91.53	20	0
	Charlottesville, VA	100.00	100.00	97.84	48.42	17	100
	Cheyenne, WY	98.79	98.17	99.12	51.21	15	88
	Columbus-Starkville-West Point, MS	99.87	99.62	99.72	66.74	17	58
	Cookeville, TN	100.00	100.00	98.97	54.51	13	65

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
9 (cont.)	Decatur, IL	99.77	99.68	96.46	87.60	13	0
	Dubuque, IA	97.15	97.16	98.82	76.76	18	26
	Elizabeth City-Nags Head, NC	100.00	99.11	99.11	95.28	25	0
	Elkins-Buckhannon-Weston, WV	99.87	99.67	99.56	94.66	16	0
	Elmira-Corning, NY	99.59	99.63	99.09	96.66	28	0
	Florence-Muscle Shoals, AL	99.72	99.75	99.35	83.59	20	12
	Ft. Walton Beach, FL	99.93	99.74	98.93	78.63	17	20
	Ithaca, NY	100.00	100.00	98.61	78.30	9	11
	Jonesboro, AR	100.00	100.00	99.65	37.74	10	111
	Joplin, MO	98.73	98.96	99.29	95.83	20	0
	Lafayette, IN	99.88	99.89	98.95	95.48	17	0
	LaSalle-Peru, IL	95.37	95.80	94.29	69.86	17	0
	Lawton, OK	100.00	100.00	99.99	56.18	13	70
	Mankato-New Ulm-St Peter, MN	100.00	98.58	95.37	65.03	16	32
	Mason City, IA	99.85	99.62	97.11	45.08	15	94
	Meadville-Franklin, PA	100.00	100.00	99.99	92.87	15	0
	Montpelier-Barre-St Johnsbury, VT	99.80	99.73	99.60	91.00	19	0
	Olean, NY	99.58	99.48	98.92	97.56	25	0
	Pittsburg, KS	99.65	99.57	99.58	94.72	20	0
	Rochester, MN	98.24	97.95	96.57	48.75	16	86
	Santa Maria-Lompoc, CA	100.00	100.00	99.74	60.85	17	69
	Sebring, FL	100.00	100.00	99.99	99.88	6	0
	St. Cloud, MN	99.94	99.83	97.50	89.60	20	0
	State College, PA	99.45	99.53	96.93	97.99	16	0
	Sunbury-Selinsgrove-Lewsiburg, PA	99.91	99.91	99.90	78.17	21	29
	Tuscaloosa, AL	98.45	98.92	98.67	49.36	16	103
	Valdosta, GA	100.00	99.76	99.60	90.89	19	0
	Winchester, VA	99.17	98.87	98.28	56.60	14	59
10	Ann Arbor, MI	99.79	99.67	99.80	46.44	10	77
	Augusta-Waterville, ME	99.86	99.71	98.29	47.13	13	86
	Battle Creek, MI	99.15	97.35	89.86	32.97	6	35
	Clarksville-Hopkinsville, TN-KY	100.00	99.10	97.38	82.97	14	6
	Concord, NH	97.59	97.56	99.21	90.21	26	0
	Danbury, CT	98.35	98.67	94.54	74.47	9	8
	Frederick, MD	99.98	99.14	95.21	62.19	10	24
	Fredericksburg, VA	99.74	99.79	99.76	97.65	11	0
	Hamptons-Riverhead, NY	99.30	99.53	98.11	92.11	15	0

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
10 (cont.)	Hilton Head, SC	100.00	99.67	97.38	91.66	14	0
	Killeen-Temple, TX	99.34	99.13	98.38	52.38	14	81
	Lewiston-Auburn, ME	99.87	99.73	99.65	93.18	3	0
	Manchester, NH	98.48	97.39	94.55	66.97	14	24
	Merced, CA	99.07	95.35	92.87	83.98	19	0
	Muskegon, MI	97.72	98.53	99.67	42.37	13	120
	New Bedford-Fall River, MA	96.01	95.10	95.42	80.94	8	3
	New River Valley, VA	99.99	99.99	98.35	70.88	17	37
	Pueblo, CO	97.87	98.09	97.45	54.41	13	55
	Rocky Mount-Wilson, NC	99.21	99.21	98.86	91.31	11	0
	Santa Fe, NM	99.87	99.92	98.91	69.87	12	27
	Sheboygan, WI	98.53	99.05	98.62	92.66	8	0
	Sussex, NJ	100.00	100.00	97.72	28.42	5	64
	The Florida Keys, FL	100.00	99.98	99.45	58.81	23	100
11	Akron, OH	95.55	95.44	94.20	59.99	13	31
	Bridgeport, CT	96.49	97.22	96.82	86.56	10	0
	Canton, OH	99.88	99.90	99.96	87.33	11	3
	Daytona Beach, FL	99.90	99.45	99.03	96.79	15	0
	Ft. Collins-Greeley, CO	99.93	99.94	99.31	57.23	20	94
	Ft. Pierce-Stuart-Vero Beach, FL	99.19	99.48	98.26	58.86	19	72
	Lakeland-Winter Haven, FL	98.00	98.79	99.37	69.31	15	0
	Lancaster, PA	97.46	96.11	92.89	91.30	14	27
	Melbourne-Titusville-Cocoa, FL	99.53	99.70	99.26	54.39	18	97
	Morristown, NJ	99.98	99.99	99.99	96.87	6	0
	New Haven, CT	97.18	96.52	91.69	56.68	11	25
	Newburgh-Middletown, NY	100.00	99.65	97.88	70.89	14	27
	Portsmouth-Dover-Rochester, NH	99.12	98.16	96.88	45.99	19	113
	Reading, PA	100.00	98.85	96.43	52.51	7	30
	Sarasota-Bradenton, FL	98.18	97.56	97.89	44.46	17	119
	Stamford-Norwalk, CT	97.63	97.93	98.76	79.62	10	10
	Stockton, CA	98.70	98.83	98.79	57.75	12	54
	Trenton, NJ	96.91	97.21	97.63	91.36	13	0
	Victor Valley, CA	99.99	99.43	98.05	65.95	31	82
	Visalia-Tulare-Hanford, CA	100.00	99.92	98.31	85.74	18	4
	Wilmington, DE	99.01	98.46	96.47	60.78	17	49
	Worcester, MA	97.86	98.00	97.11	66.90	17	39
	York, PA	96.47	96.57	96.20	91.99	14	0

Group	Market	Local Ownership Index				Stations	
		1975	1985	1995	2005	Existing	Needed
12	Middlesex-Somerset-Union, NJ	96.39	95.99	95.98	91.85	8	0
	Monmouth-Ocean, NJ	99.99	99.99	99.78	98.28	23	0
	Nassau-Suffolk, NY	97.75	97.35	93.25	77.45	25	12
	Riverside-San Bernardino, CA	99.35	99.38	96.81	63.00	32	86
	San Jose, CA	97.42	97.82	97.54	74.56	23	32

Appendix F: Commercial Formats, 1996 vs. 2005.

Format	Station Equivalents			Change in Share of Comm. Airtime
	1996	2005	Change	
Country	2376.84	2010.6	-366.24	-7.04%
Talk	548.88	810.44	+261.56	+1.59%
Oldies	680.56	799.16	+118.6	+0.06%
Adult Contemporary	1011.84	739.96	-271.88	-4.07%
News	462.08	564.84	+102.76	+0.25%
Sports	202.84	505.16	+302.32	+2.50%
Classic Rock	295.4	489.4	+194	+1.35%
Gospel	360.84	441.48	+80.64	+0.20%
Hot Adult Contemporary	166.4	354.2	+187.8	+1.49%
Contemporary Hit Radio	233.6	285.76	+52.16	+0.13%
Spanish	218.24	256.08	+37.84	+0.02%
Adult Standards	67.8	236.16	+168.36	+1.46%
Christian	153.52	227.56	+74.04	+0.45%
Rock	75.28	206.8	+131.52	+1.11%
Christian Contemporary	126.8	166.96	+40.16	+0.18%
Religion	199.32	151.88	-47.44	-0.75%
Classic Hits	31	147.88	+116.88	+1.04%
Mexican	35	142.84	+107.84	+0.95%
Urban	142.8	139.8	-3	-0.25%
Urban Adult Contemporary	133	126.6	-6.4	-0.26%
Soft Adult Contemporary	99.4	114.96	+15.56	-0.01%
Nostalgia	208.6	114.68	-93.92	-1.19%
Alternative	81	112	+31	+0.16%
Top 40	37.92	107.4	+69.48	+0.59%
Variety	75.84	94.6	+18.76	+0.06%
Album Oriented Rock	164.8	73.8	-91	-1.10%
Smooth Jazz	23	64.12	+41.12	+0.35%
Adult Album Alternative	53	63.08	+10.08	+0.01%
Children	27	59.2	+32.2	+0.26%
Full Service	89.8	52.44	-37.36	-0.48%
Ethnic	33.08	52.4	+19.32	+0.13%
Rhythm & Blues	17.4	46.96	+29.56	+0.25%
Soft Rock	20	46.84	+26.84	+0.22%
Modern Rock	65	46.4	-18.6	-0.27%
Lite Adult Contemporary	57	45.92	-11.08	-0.19%
Easy Listening	86.4	45.8	-40.6	-0.51%
Hip Hop	0	44.08	+44.08	+0.41%
Black Gospel	10	42	+32	+0.28%
Lite Rock	22.4	38.6	+16.2	+0.12%
Southern Gospel	0	37.28	+37.28	+0.35%

Format	Station Equivalents			Change in Share of Comm. Airtime
	1996	2005	Change	
Spanish Adult Contemporary	8	33.96	+25.96	+0.23%
Classical	35.52	33.56	-1.96	-0.07%
Rhythmic	1.2	32.84	+31.64	+0.29%
Adult Hits	7.4	32.2	+24.8	+0.22%
Adult Contemporary Hit Radio	18	24.72	+6.72	+0.03%
80s Hits	0	24.72	+24.72	+0.23%
Tejano	32.56	24.52	-8.04	-0.12%
Modern Adult Contemporary	1	24.28	+23.28	+0.21%
Rhythm & Blues Oldies	6	24	+18	+0.16%
Information	17.84	22.04	+4.2	+0.01%
Business and Financial News	12.6	22	+9.4	+0.07%
Inspiration	19.4	21.36	+1.96	-0.01%
Soft Hits	24	19	-5	-0.08%
Tropical	0	18.56	+18.56	+0.17%
Middle of the Road	73.4	17.52	-55.88	-0.63%
Jack	0	16	+16	+0.15%
70s & 80s	0	15.2	+15.2	+0.14%
Big Band	38.8	15	-23.8	-0.28%
Adult Rock	19	14	-5	-0.08%
Bright Adult Contemporary	2	12.6	+10.6	+0.10%
Rock Adult Contemporary	11	12.4	+1.4	0.00%
Hawaiian	3	12	+9	+0.08%
Mix Adult Contemporary	12	11	-1	-0.03%
Korean	2	11	+9	+0.08%
Jazz	21.2	10.72	-10.48	-0.13%
Religious Music	1.6	10.12	+8.52	+0.08%
Variety Hits	4	8.8	+4.8	+0.04%
Asian	3	8.8	+5.8	+0.05%
New Rock	1	8.6	+7.6	+0.07%
80s & 90s	0	8.52	+8.52	+0.08%
70s Hits	1	8	+7	+0.06%
Bluegrass	4	7.84	+3.84	+0.03%
70s Oldies	58	7.8	-50.2	-0.56%
Beautiful Music	9.4	7.72	-1.68	-0.03%
Urban Contemporary Hit Radio	4	7.6	+3.6	+0.03%
Americana	0.6	7.6	+7	+0.06%
Dance	7.2	6.4	-0.8	-0.02%
New Adult Contemporary	24	4.88	-19.12	-0.21%
International	2.4	4.52	+2.12	+0.02%
Eclectic	6	4.4	-1.6	-0.02%
Diverse	8.6	4	-4.6	-0.06%

Format	Station Equivalents			Change in Share of Comm. Airtime
	1996	2005	Change	
Polish	1	4	+3	+0.03%
Portuguese	4.8	3.8	-1	-0.02%
Comedy	0	3.4	+3.4	+0.03%
Ranchera	3	3.32	+0.32	0.00%
Progressive	7	3.2	-3.8	-0.05%
Greek	1	2	+1	+0.01%
Charlie	0	2	+2	+0.02%
Folk	0	2	+2	+0.02%
Urban Contemporary	0	2	+2	+0.02%
Polka	3.4	1.52	-1.88	-0.02%
Black	2	1.52	-0.48	-0.01%
Motivational	1	1.48	+0.48	0.00%
Beach	1.8	1.44	-0.36	-0.01%
Educational	0	1.4	+1.4	+0.01%
Japanese	1	1	0	0.00%
Christian Country	12	0	-12	-0.13%
Travel or Tourism Information	3	0	-3	-0.03%
Black Adult Contemporary	2	0	-2	-0.02%
Miscellaneous	1	0	-1	-0.01%
Public Service	1	0	-1	-0.01%
Rap	0.8	0	-0.8	-0.01%
Blues	0.4	0	-0.4	0.00%
Farming and Agriculture	0.4	0	-0.4	0.00%

Appendix G: Noncommercial Formats, 2001 vs. 2005.

Format	Station Equivalents			Change in Share of Noncomm. Airtime
	2001	2005	Change	
Variety	477.2	428.48	-48.72	-3.88%
Christian	295.96	354.36	+58.4	+1.00%
Christian Contemporary	144.76	252.12	+107.36	+3.52%
Classical	248.56	251.6	+3.04	-0.93%
Religion	171.76	196.76	+25	+0.24%
News	100.88	149.2	+48.32	+1.43%
Alternative	140.2	140.16	-0.04	-0.59%
Educational	114.4	83.32	-31.08	-1.68%
Jazz	75.2	82.04	+6.84	-0.05%
Talk	57.84	67.28	+9.44	+0.12%
National Public Radio	22	58.16	+36.16	+1.30%
Gospel	60	57	-3	-0.37%
Inspiration	42.44	46.6	+4.16	-0.02%
Contemporary Hit Radio	44.2	42.32	-1.88	-0.26%
Adult Album Alternative	42	42.12	+0.12	-0.17%
Information	29.56	37.4	+7.84	+0.18%
Album Oriented Rock	44.6	34	-10.6	-0.59%
Spanish	17.92	24.64	+6.72	+0.18%
Eclectic	11.6	22.32	+10.72	+0.36%
Adult Contemporary	27.8	18.6	-9.2	-0.47%
Religious Music	8.6	18.32	+9.72	+0.34%
Oldies	8.4	14.12	+5.72	+0.18%
Ethnic	9.6	11.4	+1.8	+0.03%
Public Service	7	11.4	+4.4	+0.14%
New Rock	15	11	-4	-0.22%
Southern Gospel	0	10.4	+10.4	+0.40%
Urban Contemporary Hit Radio	12	10	-2	-0.13%
Easy Listening	9.6	10	+0.4	-0.02%
Rock	3	9.08	+6.08	+0.22%
Country	14.4	8.8	-5.6	-0.28%
Hot Adult Contemporary	6	8	+2	+0.05%
Folk	2.28	7.8	+5.52	+0.20%
Nostalgia	5.4	6.28	+0.88	+0.01%
Modern Rock	3	6.28	+3.28	+0.11%
Urban	5.4	5.08	-0.32	-0.03%
Top 40	2	4.6	+2.6	+0.09%
Classic Rock	6	4.4	-1.6	-0.09%
Adult Standards	7	4	-3	-0.14%
Smooth Jazz	3.2	3.92	+0.72	+0.01%
Progressive	1	3.8	+2.8	+0.10%

Format	Station Equivalents			Change in Share of Noncomm. Airtime
	2001	2005	Change	
Diverse	4.4	3.6	-0.8	-0.05%
Black Gospel	1	3.6	+2.6	+0.10%
Full Service	2	3	+1	+0.03%
Motivational	5.2	2.8	-2.4	-0.11%
Big Band	2.72	2.6	-0.12	-0.02%
Soft Adult Contemporary	2	2.2	+0.2	0.00%
New Adult Contemporary	4.2	2.12	-2.08	-0.10%
Adult Contemporary Hit Radio	5	2	-3	-0.14%
Variety Hits	0	1.8	+1.8	+0.07%
Classic Hits	1.48	1.6	+0.12	0.00%
Rhythm & Blues	2	1.4	-0.6	-0.03%
Beautiful Music	0.32	1.32	+1	+0.04%
Rhythmic	2.2	1.2	-1	-0.05%
Children	1.6	1	-0.6	-0.03%
International	1	1	0	0.00%
Lite Adult Contemporary	1	1	0	0.00%
New Age	1	1	0	0.00%
Lite Rock	0	1	+1	+0.04%
Modern Adult Contemporary	0	1	+1	+0.04%
Soft Rock	0	1	+1	+0.04%
Urban Adult Contemporary	0	1	+1	+0.04%
Urban Contemporary	0	1	+1	+0.04%
Sports	2.8	0.92	-1.88	-0.08%
Mexican	3	0.8	-2.2	-0.10%
Dance	0.8	0.8	0	0.00%
Tropical	0.4	0.72	+0.32	+0.01%
Hip Hop	0	0.64	+0.64	+0.02%
Bluegrass	0.32	0.52	+0.2	+0.01%
Middle of the Road	0.4	0.4	0	0.00%
Rhythm & Blues Oldies	0.4	0.4	0	0.00%
Americana	0	0.4	+0.4	+0.02%
Asian	2	0	-2	-0.09%